Mandatory Greenhouse Gas Reporting Rule: EPA's Response to Public Comments

Volume No.: 2

Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions

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Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions

U. S. Environmental Protection Agency
Office of Atmosphere Programs
Climate Change Division
Washington, D.C.

FOREWORD

This document provides EPA's responses to public comments on EPA's Proposed Mandatory Greenhouse Gas Reporting Rule. EPA published a Notice of Proposed Rulemaking in the Federal Register on April 10, 2009 (74 FR 16448). EPA received comments on this proposed rule via mail, e-mail, facsimile, and at two public hearings held in Washington, DC and Sacramento, California in April 2009. Copies of all comments submitted are available at the EPA Docket Center Public Reading Room. Comments letters and transcripts of the public hearings are also available electronically through *http://www.regulations.gov* by searching Docket ID *EPA-HQ-OAR-2008-0508.*

Due to the size and scope of this rulemaking, EPA prepared this document in multiple volumes, with each volume focusing on a different broad subject area of the rule. This volume of the document provides EPA's responses to significant public comments received on the selection of the reporting thresholds, greenhouse gases, and de minimis provisions.

Each volume provides the verbatim text of comments extracted from the original letter or public hearing transcript. For each comment, the name and affiliation of the commenter, the document control number (DCN) assigned to the comment letter, and the number of the comment excerpt is provided. In some cases the same comment excerpt was submitted by two or more commenters either by submittal of a form letter prepared by an organization or by the commenter incorporating by reference the comments in another comment letter. Rather than repeat these comment excerpts for each commenter, EPA has listed the comment excerpt only once and provided a list of all the commenters who submitted the same form letter or otherwise incorporated the comments by reference in table(s) at the end of each volume (as appropriate).

EPA's responses to comments are generally provided immediately following each comment excerpt. However, in instances where several commenters raised similar or related issues, EPA has grouped these comments together and provided a single response after the first comment excerpt in the group and referenced this response in the other comment excerpts. In some cases, EPA provided responses to specific comments or groups of similar comments in the preamble to the final rulemaking. Rather than repeating those responses in this document, EPA has referenced the preamble.

While every effort was made to include significant comments on the selection of reporting thresholds, greenhouse gases, and de minimis provisions in this volume, some comments inevitably overlap multiple subject areas. For comments that overlapped two or more subject areas, EPA assigned the comment to a single subject category based on an assessment of the principle subject of the comment. For this reason, EPA encourages the public to read the other volumes of this document with subject areas that may be relevant to the selection of the reporting thresholds, greenhouse gases, and de minimis provisions.

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1. SELECTION OF GREENHOUSE GASES TO REPORT

Commenter Name: See Table 10
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 5

Comment: In the preamble to the proposed rule EPA provides a rationale for its selection of the Kyoto Protocol listed GHGs as the foundation for reporting under this rule. Additionally, EPA elected not to include other compounds, such as water vapors, ozone depleting substances (ODS), tropospheric O_3, or 'black carbon'. API comments In response to EPA's request for comments on the selection of GHGs that are - or are not - included in the proposed rule, API supports the selected approach. This approach would make the U.S. program more consistent with efforts by other countries around the globe. It would also prevent duplication or redundancy with the range of EPA, State and Local Agency programs that are already being implemented to control ODS, tropospheric O_3 and fine particles (including soot or 'black carbon'). API also supports the approach where the list of target compounds for reporting is pared down, or adjusted, for the different source categories based on typical gases that might be emitted from their operations. As such API supports that the primary focus for reporting should be CO_2, CH_4 and N_2O, when appropriate for the source categories. GHG emissions should be characterized and reported only when specifically listed for a specific source category or a range of sources.

Response: EPA thanks the commenter for their input. The final rule covers the same GHGs as the proposal. Please see the Preamble, Section II.C. for a discussion of the GHGs to report. Consistent with the commenter's suggestions, the specific rule subparts for each source category list the GHGs to be reported for each source category.

Commenter Name: J. Randall Curtis MD
Commenter Affiliation: American Thoracic Society (ATS)
Document Control Number: EPA-HQ-OAR-2008-0508-0510.1
Comment Excerpt Number: 3

Comment: The ATS believes that the other six GHGs identified by EPA - CO_2 CH_4, N_2O, HFCs, PFCs SF_6 and other fluorinated compounds (NF_3, HFEs) - are appropriate.

Response: EPA thanks the commenter for their input. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Lauren Trevisan
Commenter Affiliation: Sierra Club
Document Control Number: EPA-HQ-OAR-2008-0508-0212u
Comment Excerpt Number: 4

Comment: We believe that collecting data on individual greenhouse gases is the right choice. EPA will collect data on emissions of individual greenhouse gases, in addition to converting these emissions into the equivalent emissions of carbon dioxide. The result from this will be a map of where particularly potent greenhouse gases are being emitted, set alongside a

comprehensive national emissions picture, calibrated with a shared unit of measurement. This system is going to allow EPA to discover opportunities to reduce particular pollutants and also provide a sound comparative view of emission sources across the economy.

Response: EPA thanks the commenter for their input. As explained in the preamble response on GHGs to report, the final rule covers the same GHGs as the proposal and requires reporting by gas as well as CO2e.

Commenter Name: Helen A. Howes
Commenter Affiliation: Exelon Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0373.1
Comment Excerpt Number: 4

Comment: Exelon supports the inclusion of all six Kyoto greenhouse gases in the rule. Both domestic and international programs to date have focused on these gases. It is important that EPA gather data on all of these gases to inform future rule making which may include both domestic and international components.

Response: EPA thanks the commenter for their input. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Nancy N. Young
Commenter Affiliation: Air Transport Association of America, Inc. (ATA)
Document Control Number: EPA-HQ-OAR-2008-0508-0522.1
Comment Excerpt Number: 2

Comment: While water vapor is the most abundant naturally occurring GHG and makes up a significant share of the natural, background greenhouse effect, the Preamble correctly observes that emissions of water vapor that are a direct result of human activities have only a negligible effect on its atmospheric concentrations. Research indicates that significant changes to global atmospheric concentrations of water vapor may occur indirectly if human-induced global warming increases the amount of water vapor in the atmosphere because a warmer atmosphere can hold more moisture. However, such changes in water vapor concentrations are not an initial driver of climate change, but rather a potential effect of human-generated direct GHG emissions on climate change (i.e., as a positive feedback that further enhances warming). Accordingly, it makes little sense from a regulatory perspective to attempt to track or attempt to regulate anthropomorphic water vapor emissions. This conclusion is consistent with the approach that has been taken in the National Emissions Inventory, which recognizes that anthropogenic emissions of water vapor are not a significant driver of anthropogenic climate change and excludes them for reporting purposes. Similarly, the IPCC does not list direct emissions of water vapor as an anthropogenic forcing agent of climate change and the GHG inventory reporting guidelines under the United Nations Framework Convention on Climate Change ("UNFCCC") do not require data on water vapor emissions. In any event, means and methods for accurately reporting water vapor emissions have not been developed. Given the above, ATA believes that EPA has proposed the correct reporting approach by keeping the appropriate reporting focus on direct emissions and by excluding water vapor, thereby ensuring consistency, reducing burdens and eliminating confusion across existing state, national and international reporting regimes.

Response: EPA thanks the commenter for their input, and agrees that water vapor should not be included in the final rule. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 1.

Commenter Name: B. Gentile
Commenter Affiliation: Drexel University
Document Control Number: EPA-HQ-OAR-2008-0508-0231.1
Comment Excerpt Number: 3

Comment: That the proposed rule only requires the reporting of the most abundantly emitted GHGs that result from human activity, again shows the EPA not trying to be overly regulatory. It would be easy for the EPA to try and set up a rule that would require reporting of all the GHGs and requiring the facility to take more time making up the reports for the EPA instead of trying to improve on its ineptitudes. This is an important aspect of any proposed rule. Again, I would not support the over regulation of any private facility, and I do not feel that this proposed rule does that.

Response: EPA thanks the commenter for their input. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Nancy N. Young
Commenter Affiliation: Air Transport Association of America, Inc. (ATA)
Document Control Number: EPA-HQ-OAR-2008-0508-0522.1
Comment Excerpt Number: 1

Comment: Reporting should be limited to the six major direct GHGs. ATA supports EPA's proposal to focus reporting on the six major direct GHGs (i.e., CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 and other fluorinated compounds) as defined in the Proposed Reporting Rule. These are the most abundant anthropomorphic GHGs and have long been the common focus of the climate change research community. The efforts of EPA, the Intergovernmental Panel on Climate Change ("IPCC"), regional, state and other bodies have concentrated on these six gases for both scientific assessments and emissions inventory purposes because they are long-lived, well-mixed, and have a high global warming potential ("GWP"). Furthermore, because they are the direct result of human activity, they can be readily identified and quantified for reporting purposes and lend themselves to reductions through regulatory measures. These GHGs also comprise the current EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks (the "National Emissions Inventory"). Significantly, a review of National Emissions Inventory reveals that the reporting of these six gases will achieve comprehensive coverage of the most important and best understood man-made climate drivers. In this regard, CO_2 is the largest source of GHGs emitted by human activities and is recognized as the most significant forcing agent with respect to anthropomorphic climate change. Additionally, the combined effect of CH_4, N_2O, HFCs, PFCs, SF_6, and the other fluorinated compounds generated by human activity capture the remainder of the relevant inventory of climate-forcing GHGs. Taken together, capturing the six direct GHGs targeted by the Proposed Reporting Rule will serve to ensure a complete and effective reporting regime. Additionally, because these six direct GHGs have been the focus of prior scientific assessments and inventories, established norms and methodologies have emerged that allow them to be readily quantified, both in absolute and relative terms. That is significant for purposes of developing a coherent, consistent and accurate national reporting regime, because GHGs have

different heat trapping capacities that are not directly comparable without translating them into common units. More specifically, all six of these direct GHGs can be expressed in terms of GWP, a metric that incorporates both the heat-trapping ability and atmospheric lifetime of each GHG, which can then be used to develop comparable numbers by adjusting all of these GHGs relative to the GWP of CO_2. When reported quantities of the different GHGs are multiplied by their GWPs, the different GHGs can be compared on a carbon dioxide equivalent ("CO_2e") basis. In turn, aggregating all six (or any combination) of all of these GHGs on a CO_2e basis at the source level allows a comparison of the total emissions of direct GHGs from one source with emissions from other sources, which ultimately will help foster the development of a fair, accurate and meaningful national reporting scheme. In sum, limiting reporting to these six GHGs will provide the most useful and consistent, best understood, least burdensome and most readily implemented reporting regime to inform and enable future policy development and better improve the accuracy of the National Emissions Inventory.

Response: EPA thanks the commenter for their input. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Benjamin Brandes
Commenter Affiliation: National Mining Association (NMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0466.1
Comment Excerpt Number: 17

Comment: NMA agrees with EPA's decision to limit the GHGs reported to CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, and other fluorinated compounds. There is no reason for EPA to go beyond the GHGs that are the subject of this debate internationally, in regional programs and in other countries.

Response: EPA thanks the commenter for their input See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Patrick J. Nugent
Commenter Affiliation: Texas Pipeline Association (TPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0460.1
Comment Excerpt Number: 12

Comment: TPA supports EPA's decision to exclude water vapor, CFCs, HCFCs, halons, tropospheric 03, and black carbon from the proposed reporting requirements. As the preamble notes, water vapor emissions from human activities have a minimal impact on atmospheric concentrations of water vapor. and changes in water vapor concentrations are not an initial driver of climate change. See 74 Fed. Reg. 16464. Accordingly, EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks does not include water vapor, and GHG inventory reporting guidelines under the United Nations Framework Convention on Climate Change do not require data on water vapor emissions. It is therefore appropriate that water vapor emissions he excluded from the rule's coverage.

Response: EPA thanks the commenter for their input, and agrees that the listed compounds should not be included in the final rule. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 1.

Commenter Name: Patrick J. Nugent
Commenter Affiliation: Texas Pipeline Association (TPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0460.1
Comment Excerpt Number: 13

Comment: As to CFCs, HCFCs, and halons, these gases are already being strictly controlled on a worldwide basis. As the preamble notes, the climate change research and policy community typically does not focus on these substances, because they are already being addressed through non-climate policy mechanisms such as the Montreal Protocol. See 74 Fed. Reg. 16464.

Response: EPA thanks the commenter for their input, and agrees that these ozone depleting substances should not be included in the final rule. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 1.

Commenter Name: Sam Chamberlain
Commenter Affiliation: Murphy Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0625
Comment Excerpt Number: 13

Comment: In the preamble (16464-16465) to the proposed rule EPA has provided a rationale for its selection of the Kyoto Protocol listed GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) as the foundation for reporting under this rule. Additionally, EPA has elected not to include other compounds, such as water vapors, ozone depleting substances (ODS), tropospheric O_3, or 'black carbon', as not appropriate for data collection under this reporting rule. As the nation continues to engage in the debate regarding climate change, it may be useful to determine the real level of CO_2e contribution from the USA over time and compare it with other significant major contributing countries in the world (China, India, and Russia). Murphy recommends the reporting of the six key GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) and also supports EPA's decision to NOT report other compounds (water vapors, ozone depleting substances (ODS), tropospheric O_3, or 'black carbon'), as our belief, that water vapor is not anthropogenic, and that the other compounds are so small as not to be worth the time and effort to pursue measuring and reporting of these.

Response: EPA thanks the commenter for their input, and agrees that water vapor, ozone depleting substances, O_3, and black carbon should not be included in the final rule. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 1.

Commenter Name: Patrick J. Nugent
Commenter Affiliation: Texas Pipeline Association (TPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0460.1
Comment Excerpt Number: 14

Comment: The proposed rule properly excludes tropospheric O_3 because this gas has a short atmospheric lifetime, its concentrations are highly variable, and its relevance to climate change issues is highly uncertain. Moreover, as the preamble notes, tropospheric O_3 is already listed as a NAAQS pollutant and its precursors are reported to state regulatory bodies. See 74 Fed. Reg. 16464. It is also appropriate that the proposed rule excludes black carbon.

Response: EPA thanks the commenter for their input, and agrees that O_3 should not be included in the final rule. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 1.

Commenter Name: Patrick J. Nugent
Commenter Affiliation: Texas Pipeline Association (TPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0460.1
Comment Excerpt Number: 15

Comment: TPA supports EPA's decision to limit reporting requirements in each subpart to those GHG that are directly related to the industry sector to which the subpart applies. A broader approach would result in unnecessary effort and expense while yielding little additional useful data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 14

Comment: MidAmerican submits that the reporting of these additional GHGs should not be required because current science indicates that these gasses have negligible or indeterminate climate change forcing compared to CO_2.

Response: The commenter is referring to EPA's proposal not to regulate water vapor, ozone depleting substances, tropospheric ozone, and black carbon. EPA thanks the commenter for their input. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Anonymous public comment
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0200
Comment Excerpt Number: 1

Comment: Take CO_2 off your list.

Response: The final rule requires reporting of CO_2 from appropriate source categories because it is the largest contributor of GHGs directly emitted by human activities, both globally and in the United States, and is a significant driver of climate change. Collecting data on CO_2 emissions, among other GHGs, is consistent with the GHG inventory reporting guidelines under the United Nations Framework Convention on Climate Change (UNFCCC), the IPCC, and other voluntary or mandatory State and Federal programs.

Commenter Name: C. E. Moore
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0185

Comment Excerpt Number: 1

Comment: This proposed rule would regulate a gas required for the continuance of human life and whose quantity is highly variable. I would also bring to your attention the gases in question are not in sufficient quantity to have any impact on human health.

Response: See the preamble for the response on selection of GHGs to report. Regarding the comment on health effects of GHGs, please see volume 7 of the response to comments documents.

Commenter Name: Jeffry C. Muffat
Commenter Affiliation: 3M Company
Document Control Number: EPA-HQ-OAR-2008-0508-0793.1
Comment Excerpt Number: 1

Comment: Perhaps no issue is in more need of absolute clarity in the proposed greenhouse gas reporting rule than the definition of what gases are covered. As written, EPA's definition of "fluorinated greenhouse gas" is unclear, overly broad and would require extensive monitoring, reporting and record keeping for nonvolatile materials that are not emitted to the atmosphere. This definition is critical to an understanding of the reporting requirements under Subparts L and OO of the proposed rule. EPA's two alternatives to the proposed definition are either equally unclear and overly broad or somewhat incomplete. 3M requests that EPA require reporting of only those fluorinated compounds listed in Table A-1 of proposed 40 CFR part 98, subpart A. Moreover, 3M requests that EPA create through this rulemaking a visible, participative process to ensure that there is an expanded defined list of fluorinated GHGs that determines the scope of compliance with Subparts L and OO. The proposed 98.6 defines "fluorinated greenhouse gas" as follows: "Fluorinated greenhouse gas means sulfur hexafluoride(SF_6), nitrogen trifluoride (NF 3), and any fluorocarbon except for controlled substances as defined at 40 CFR Part 82 Subpart A. In addition to SF_6 and NF_3, "fluorinated GHG" includes but is not limited to any hydrofluorocarbon, any perfluorocarbon, any fully fluorinated linear, branched or cyclic alkane, ether, tertiary amine or aminoether, any perfluoropolyether, and any hydrofluoropolyether." EPA requested comment on the definition and other options as follows: "EPA requests comment on the proposed definition. EPA also requests comment on two other options for defining or refining the set of fluorinated GHGs to be reported. The first option would permit a fluorocarbon to be excluded from reporting if (1) the GWP for the fluorocarbon were not listed in Table A-1 of proposed 40 CFR part 98, subpart A or in any of the IPCC Assessment Reports or World Meteorological Organization (WMO) Scientific Assessments of Ozone Depletion, and (2) the producer or importer of the fluorocarbon could demonstrate, to the satisfaction of the Administrator, that the fluorocarbon had an atmospheric lifetime of less than one year and a 100-year GWP of less than five. In general, we expect that new fluorocarbons would be used in relatively low volumes. For such chemicals, a GWP of five may be a reasonable trigger for reporting. The second option would be to require reporting only of those fluorinated chemicals listed in Table A-1 of proposed 40 CFR part 98, subpart A. The disadvantage of this approach is that it would exclude any new (or newly important) fluorocarbons whose GWPs have not been evaluated." 74 Fed. Reg. 16579. The proposed definition of a "fluorinated greenhouse gas" is essentially unlimited in scope. It is defined to include "any fluorocarbon" and "includes but is not limited to" several specific classes of fluorinated compounds. Such a definition would include not only volatile fluorochemicals, but also fluorinated materials that are nonvolatile such as polymers, surfactants and ionic compounds. Although such nonvolatile materials are not

emitted to the atmosphere, the proposed rule would subject companies to the same monitoring, reporting and record-keeping requirements. The definition needs to be narrowed to include only those materials that could reasonably be expected to be emitted to the atmosphere. Additionally, this definition would include many compounds for which GWPs have not been calculated. As such, each company would need to translate these materials into a CO_2e to make any type of reporting meaningful. Given that no set criteria is provided in the proposed rule on how to make such calculations, companies would be left to use their own judgment on how such calculations should be made; making for potentially incomplete and inconsistent reports. In terms of other options, EPA's first option (exclusion of a fluorocarbon if the GWP is not listed in the IPCC or WMO assessments and it could be demonstrated that the compound has an atmospheric lifetime of less than one year and a 100-year GWP of less than five) would effectively exclude very few compounds and be essentially the same as the original definition. Very few compounds would meet both the lifetime and GWP criteria. Fluorocarbons with atmospheric lifetimes less than one year would typically have GWP values up to about 100. Conversely, a fluorocarbon with a GWP less than five would need to have an atmospheric lifetime much less than one year and probably on the order of a few days or weeks. The second option would use Table A-1 to define a fluorinated GHG. It provides the necessary certainty and specificity for the stringent reporting requirements incorporated into subparts L and OO by providing reference to a discrete list of compounds. This approach addresses the concerns noted above that arise from the inclusion of "any fluorocarbon" in the definition. It also addresses the issue presented by the unavailability of GWPs associated with the inclusion of a broader category of compounds by limiting the list to those compounds for which GWPs have been calculated. However, Table A-1 is not a comprehensive list. Its compilation by the IPCC reflects only the fact that the listed materials are synthesized, their atmospheric properties were investigated, and the authors of the list could find published data. It also includes compounds that have low GWPs that were designed to specifically replace compounds with much higher GWPs, which are not on the list. It is also important to note that the IPCC assessment reports are not accurate in their reporting of the lifetimes and GWPs of the hydrofluoropolyethers that have been listed. Attachment I to these comments provides a more detailed explanation of the error in the reported atmospheric properties of these materials. At the present time, absent guidance on how companies should consistently and accurately calculate GWPs, 3M requests that EPA require reporting of only those fluorinated compounds listed in Table A-1. However, 3M requests that EPA create through this rulemaking a visible, participative process to ensure that there is an expanded defined list of fluorinated GHGs that determines the scope of compliance with Subparts L and OO. Such a process would ensure that all parties are aware of and understand what gases are included in reporting requirements and are not left to themselves to determine when and whether a fluorinated GHG is part of the rule or how to calculate its GWP. As this reporting data will undoubtedly form the basis for possible future regulation, it is critically important that all parties are working off the same set of definitions, criteria and interpretations from the beginning of the process. Because the currently proposed rule is overly broad, 3M suggests that the definition of fluorinated GHG be amended to read: "Fluorinated greenhouse gas means sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3) and any fluorocarbon listed in Table A-1 of proposed 40 CFR part 98, subpart A or in any of the IPCC Assessment Reports or World Meteorological Organization (WMO) Scientific Assessments of Ozone Depletion, except for controlled substances as defined at 40 CFR Part 82 Subpart A. On an annual basis, the fluorinated GHGs included in this definition will be reviewed and GHGs with their GWPs may be revised, added or deleted from the definition." Such a definition allows for the expansion of the materials listed in the Table A-1 approach while ensuring that future additions to the definition will be the subject of review and comment and understanding by all affected parties.

Response: See the preamble section on Subpart OO, suppliers of industrial GHGs, as well as the response to comments document on same, for the response to comments on the definition of fluorinated GHGs, consideration of short-lived compounds, volatility criteria, reporting of fluorinated GHGs that are produced but do not have GWPs in Table A-1 of 40 CFR part 98, subpart A, the intent to periodically update the GWPs in Table A-1, and associated comments. Also note that at this time EPA is not going final with the fluorinated GHG production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Jeffry C. Muffat
Commenter Affiliation: 3M Company
Document Control Number: EPA-HQ-OAR-2008-0508-0793.1
Comment Excerpt Number: 2

Comment: The Agency is encouraged to consider an atmospheric lifetime threshold below which a compound would be excluded from reporting. Short-lived compounds have lower potential to affect climate change and in the case of very short-lived gases will have negligible GWPs. It is recognized that the GWP values calculated for short-lived compounds are subject to much greater uncertainty since these gases are not well mixed throughout the troposphere. In the IPCC/TEAP Special Report of 2005, section 2.5 regarding the calculation of GWPs, it is stated that "one should be cautious about using the derived GWP values for gases with lifetimes shorter than 5 years that may not be uniformly mixed in the atmosphere" and for very short-lived compounds the "notion of GWP may prove less useful." Short-lived fluorocarbons would often have GWP values that are no greater than the indirect GWPs associated with non-methane hydrocarbons. The IPCC/TEAP Special Report of 2005, table 2.8 lists the indirect GWP values for several hydrocarbons ranging from 4.9 to 8.4. Since GWP values have greater uncertainty and are less available, the use of a threshold lifetime, such as one year, would provide more useful guidance. Alternatively, if a GWP threshold is selected, the Agency should consider a GWP threshold of 150 to encourage substitution of high GWP materials with low GWP materials.

Response: See the response to EPA-HQ-OAR-2008-0508-0793.1, excerpt 1. EPA determined that GWP is the most prudent and appropriate approach for collecting GHG emissions data. GWP inherently reflects the atmospheric life-span of GHGs and is an internationally accepted standard recognized and utilized by the IPCC, UNFCCC, and Kyoto Protocol. Regarding the alternative suggestion to incorporate a GWP threshold of 150 to encourage substitution, EPA stresses that the final rule intends to collect data of sufficient accuracy and quality to inform future climate policy development, thus it would be premature at this time to include such a threshold level for GHGs. Changing the behavior of firms by encouraging substitution is beyond the scope of this rule.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 19

Comment: Within any reporting scheme, EPA must develop a method to manage the GHG reporting program. The Intergovernmental Program on Climate Change ("IPCC") coordinates a

program to develop global warming potential ("GWP") values, expressed in CO_2e for a variety of known GHGs. IPCC also re-evaluates existing GWP values from time to time. EPA should, if required to regulate GHG emissions, freeze accepted published GWP values at the time of adoption. For industrial GHGs with established GWPs, EPA should utilize the IPCC 4th Assessment Report ("AR4") data for all established industrial GHGs, instead of the mix of 2nd Assessment Report ("SAR"), 3rd Assessment Report ("TAR"), and AR4 GWP values included in proposed Table A-1. We understand that EPA uses SAR for United Nations Framework Convention on Climate Change ("UNFCCC") reporting, but EPA is collecting raw emissions data by compound and can convert the GWPs for various reporting obligations. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2007, EPA/430/09-004, United States Environmental Protection Agency, April 15, 2009, Page 1-8. This freezing of accepted AR4 GWPs would allow reporters to consistently evaluate applicability for all potentially affected sources over time without having to consider how to calculate varying GWP values. At the 2008 UNFCCC meetings in Accra, Ghana a proposal was made to include hydrofluoroethers, hydrocarbons, sulfuryl fluoride and nitrogen trifluoride, and several other chemicals as greenhouse gases. Such a determination would begin the process of identifying a GWP for each identified compound, which would be published in a future consensus process. By treaty, EPA should incorporate the material exhibiting a GWP documented after the final promulgation date of this reporting rule and include them within the appropriate GHG grouping. EPA should not create an inventory system for materials classes with potentially changing membership without developing a procedure to address adding members to a group. For instance, if the IPCC recognizes a GWP for an industrial GHG compound ten years from now, emissions of that compound would, at some point, need to be added to the reporting system for reporters producing, importing, exporting, and/or emitting the newly identified GHG. These emissions, though existing, would then, under some mechanism, become subject to any GHG reporting rules or treaty obligations. As EPA appropriately included GWPs in proposed Table A-1, EPA would need to periodically amend the GWP Table A-1 and, necessarily, the membership of one or more GHG classes. We recommend that EPA adjust Table A-1 within two to three years of the IPCC publication of a new assessment report by notice-and-comment rulemaking. EPA would use such notice-and-comment rulemaking to add or remove compounds to the GHG lists as documented by IPCC, and adjust GWP values as appropriate. EPA should included in Subpart A a procedure to manage how threshold determinations may change with evolving science. Arkema notes that such reporting is still consistent with current legislative initiatives that control total CO_2e by class, since the aggregate of individual chemicals volume times the relevant GWP would yield the total class CO_2e.

Response: See the response to EPA-HQ-OAR-2008-0508-0793.1, excerpt 1. Also see the comment response document on Subpart A (General Provisions) applicability issues for responses on how to calculate CO_2e emissions for applicability determination. Regarding the comment on selection of GWPs, we have chosen to use GWPs published in the Intergovernmental Panel on Climate Change Second Assessment Report (IPCC SAR) (based on a 100-year time horizon) because they allow comparability of data collected by this rule to the national GHG inventory that EPA compiles annually to meet U.S. commitments to the United Nations Framework Convention on Climate Change (UNFCCC). However, for fluorinated GHGs for which the SAR does not provide a GWP value, Table A-1 in 40 CFR part 98, subpart A includes values available from later reports.

Commenter Name: Tim Higgs
Commenter Affiliation: Intel Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0759.1
Comment Excerpt Number: 5

Comment: GHG Definition Should be Limited to Kyoto "Basket of Gases," plus NF_3 The definition of GHGs is much broader than the Kyoto basket of gases. The definition of fluorinated GHGs in particular is very broad and potentially includes many materials that have not previously been quantified. It's not clear if accurate measurement methods (or GWP values) even exist for all of these compounds. Initially the rule should focus on the Kyoto basket of gases plus NF_3, Adding a de minimus threshold as discussed above would also help address some of this concern.

Response: See the preamble section on Subpart OO, suppliers of industrial GHGs, for the response on the definition and reporting of fluorinated GHGs.

Commenter Name: Kevin Messner
Commenter Affiliation: Association of Home Appliance Manufacturers (AHAM)
Document Control Number: EPA-HQ-OAR-2008-0508-0339.1
Comment Excerpt Number: 2

Comment: If fluorinated GHGs are included in the final rule, the definition of fluorinated GHGs should include those chemicals listed in Table A-1 of proposed 40 CFR part 98, subpart A and not allow it to be expanded without a rulemaking and without public comment. Without additional opportunity for comment on the addition of new compounds, the process would become less transparent and lessen confidence in the regulatory process. Using the provided list in Table A-1, at minimum, provides the certainty to manufacturers needed to plan for the future with an understanding that the list will not change at a moment's notice. Should the EPA decide to include fluorinated GHGs in the reporting requirements, it is important to provide an incentive to manufacturers to transition out of high GWP HFCs. We would recommend that a reasonable trigger for reporting would be for fluorinated GHGs with a GWP of 150 or higher, which is consistent with European Union regulations.

Response: See the preamble section on Subpart OO, suppliers of industrial GHGs, for the response on the definition and reporting of fluorinated GHGs and on the process for adding the GWPs of additional compounds to Table A-1. See the response to EPA-HQ-OAR-2008-0508-0793.1, excerpt 2 for a response to the comment regarding the establishment of a GWP threshold of 150.

Commenter Name: Stuart A. Clark
Commenter Affiliation: Washington State Department of Ecology (Ecology)
Document Control Number: EPA-HQ-OAR-2008-0508-0646.1
Comment Excerpt Number: 8

Comment: Inclusion of fluorinated gases as reportable GHG emissions: Ecology supports EPA's inclusion of the six key GHG emissions and other fluorinated gases. There is growing concern regarding both the prevalence of fluorinated gas emissions, and their high global warming potential. Nitrogen trifluoride and fluorinated aldehydes are substances of particular

concern given their prevalent use in the electronics and silicon wafer manufacturing sectors, and their large global warming potentials. Further, there is a growing body of evidence suggesting that sulfuryl fluoride, a fumigant increasingly being looked to as an alternative to methyl bromide, is also a concern. We currently lack accurate data as to the true scale and impact of these emissions. Including a reporting requirement for these emissions will allow for improved understanding by both the regulatory community and sources as to the impacts of these substances.

Response: EPA thanks the commenter for their input. As explained in the preamble response on GHGs to report, the final rule covers the same GHGs as the proposal. Also see the preamble section on Subpart OO, suppliers of industrial GHGs, for the response on fluorinated GHGs to report.

Commenter Name: Mary Munn
Commenter Affiliation: Fond du Lac Band of Lake Superior Chippewa
Document Control Number: EPA-HQ-OAR-2008-0508-0596
Comment Excerpt Number: 2

Comment: The rule should acknowledge that new or unrecognized GHGs may need to be added to the list.

Response: See the preamble section on Subpart OO, suppliers of industrial GHGs, for the response on fluorinated GHGs to report. EPA retains the ability, through notice and comment rulemaking, to add to the set of GHGs that must be reported.

Commenter Name: Robert Rouse
Commenter Affiliation: The Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2008-0508-0533.1
Comment Excerpt Number: 8

Comment: The proposed rule requires the reporting of CO_2, CH_4, N_2O, HFC's, PFC's and other fluorinated gases. As the foundation for reporting, Dow supports the use of a list of specific compounds for which reporting would be required. Reporting requirements that rely on anything different than a specific list of gases could result in ambiguous reporting obligations and results. Dow suggests that the list of compounds presented in Table A-1 (pg. 16629) of the proposed rule are the compounds for which emissions reporting should be required.

Response: See the preamble section on Subpart OO, suppliers of industrial GHGs, for the response on fluorinated GHGs to report.

Commenter Name: Kevin Fay
Commenter Affiliation: International Climate Change Partnership (ICCP)
Document Control Number: EPA-HQ-OAR-2008-0508-0490.1
Comment Excerpt Number: 6

Comment: ICCP believes that the initial reporting periods should concentrate on the gases included in the United Nations Framework Convention on Climate Change (UNFCCC).

Additional reporting requirements can be developed as policy approaches are developed and reporting can be expanded in a more systematic manner, e.g., every four years or in concert with the IPCC assessment process. The UNFCCC gases are the predominant gases for consideration at this time. Other compounds, such as the Montreal Protocol covered compounds, are appropriately covered elsewhere, and the scientific assessment process for other areas, such as black carbon and tropospheric ozone, are unsettled.

Response: EPA thanks the commenter for their input. See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 5.

Commenter Name: Stanley P. Rhodes
Commenter Affiliation: Science Certification Systems (SCS)
Document Control Number: EPA-HQ-OAR-2008-0508-1019.1
Comment Excerpt Number: 1

Comment: We strongly urge EPA to reconsider its decision to exclude black carbon and the anthropogenic precursors to tropospheric ozone in its reporting requirements. While the major GHGs covered by the proposed rule are consistent with those GHGs listed in the Kyoto Protocol, they do not include all of "the major GHGs that are directly emitted by human activities," in accordance with EPA's stated goals for the rulemaking. Evidence from numerous scientific studies demonstrates that black carbon and tropospheric ozone (formed from precursor emissions) are "major" GHGs in terms of volume, anticipated growth, and potency of impact on the climate. Even though black carbon and tropospheric ozone have considerably shorter atmospheric lifetimes than the GHGs listed by the EPA, these two additional categories should be considered as "major" GHGs for several reasons: (1) their extremely high potency in terms of global warming potential (i.e., radiative forcing) relative to CO_2; (2) the anticipated high levels and increases in emissions of these GHGs during the critical next two decades due to human activities; (3) the disproportionate regional influence of these substances over particularly sensitive regions, such as the Arctic; and (4) the short timeframe within which action is needed to avert catastrophic events in such sensitive regions, due in part to the presence of these GHGs. One major reason cited by the EPA for the exclusion of tropospheric ozone and black carbon from the reporting requirements is the Agency's concern about uncertainty relating to the global heating effects and questions about the relevance to climate change of these two GHGs. However, the significant role played by these two gases has become increasingly evident through ongoing scientific research, making it clear that these gases must be accounted for. Uncertainty surrounding calculations can be addressed substantially by utilizing shorter (e.g., annual) time horizons [See reference provided by commenter: "LCSPA Metrics Used to Calculate GHG/GHP Loadings."] Likewise, we urge the EPA to include the reporting of sulphate aerosol emissions in its GHG registry, in order to develop a more complete understanding of the aggregate radiative forcing effect of all anthropogenic emissions from reporting entities. Aerosols have been shown to have an effect on climate change on a regional basis, both directly and indirectly, in both positive and negative ways. Leaving them out of consideration can dramatically change the overall radiative forcing estimates in an area, leading to incorrect policy decisions. As such, they are an important part of the climate puzzle that must be included in further policy considerations. A considerable body of scientific research provides support for the extension of the reporting requirement to include these categories. Recent studies have shown with greater certainty the important role that both tropospheric ozone and black carbon are playing in regional warming in critical regions, such as the Arctic, Antarctic and parts of Africa.[See submittal for citations provided by commenter.] For instance, recent studies by the Arctic Monitoring and Assessment

Programme have estimated that these two pollutants, combined with methane, are responsible for between 50 and 80% of the regional warming (and its consequences) in the Arctic. In order to minimize any added burden on reporting entities, the EPA should consider options for forwarding data on NOx and SO2 emissions that is already reported to the States under the Clean Air Act to the GHG emissions registry. In addition, we would suggest that the EPA analyze and implement an expansion of the reporting requirements to a broader set of sources to address these additional GHG categories, based on the best available science, as soon as practicable.

Response: We received several comments on both sides of this issue, and EPA carefully considered whether to include reporting of black carbon and precursors to tropospheric ozone in this rule. EPA is currently undertaking work to further evaluate the role of black carbon in climate change, in addition to its role as an element of the already-regulated (and reported) PM2.5. EPA has also received petitions to specifically address black carbon emissions under the Act from marine and aviation sources, and EPA plans to respond to these petitions in the future. Additionally, EPA is considering comments on addressing black carbon related to the proposed Endangerment or Cause and Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act (74 FR 18886).

The EPA recognizes the warming effect of black carbon and tropospheric ozone, and the particular concerns raised with regards to the role black carbon may be playing in observed warming and ice melt in the Arctic. However, the EPA notes that there are a number of differences between black carbon, tropospheric ozone, and the gases which this reporting rule addresses. Black carbon is an aerosol particle resulting from incomplete combustion and remains in the atmosphere for only about a week. Similarly, tropospheric ozone is produced indirectly as a result of several precursor emissions and has a lifetime of hours to weeks. Therefore, these substances have concentrations which are fairly variable over space and time, unlike the long-lived GHGs. The uncertainty in the net climate effect of even just the direct forcing of these substances is also proportionally much greater than the uncertainty of the net climate effect of the long-lived GHGs, as documented in the IPCC 4th Assessment Report. Additionally, black carbon, as a component of particulate matter (PM), and tropospheric ozone are both already regulated as criteria air pollutants under the CAA.

Given the number of science, policy, and definitional issues for black carbon and tropospheric ozone that are different than for the six greenhouse gases, these substances warrant separate consideration and therefore EPA determined not to include black carbon or tropospheric ozone precursors in the selection of GHGs to report in this final rule.

Commenter Name: Nancy N. Young
Commenter Affiliation: Air Transport Association of America, Inc. (ATA)
Document Control Number: EPA-HQ-OAR-2008-0508-0522.1
Comment Excerpt Number: 3

Comment: According to the IPCC, black carbon is an aerosol particle that results from incomplete combustion of the carbon contained in fossil fuels and has a very short residence time in the atmosphere (a week or less). As such, it too is readily distinguishable from the six direct GHGs that are long-lived and well-mixed in the atmosphere. Even more significantly, both the direct and indirect radiative forcing properties of aerosols, including sulphates, organic carbon, and black carbon, are not well understood. While the net effect of anthropogenic aerosols is believed to provide a cooling effect, there is considerable uncertainty in quantifying the effects

of black carbon on radiative forcing. In this regard, the National Academy of Sciences has explained "that the level of scientific understanding regarding the effect of black carbon on climate is 'very low' and it is unclear whether black carbon actually has direct or indirect warming effects." Accordingly, reporting of black carbon should be excluded from the final rule as it would be confusing, problematic in terms of quantification, and provide no benefit in terms of informing policy or regulatory decisions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1019.1, excerpt 1.

Commenter Name: See Table 14
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0635
Comment Excerpt Number: 41

Comment: We strongly urge EPA to include black carbon emissions in the reporting rule.241 Recent scientific studies identify black carbon, a component of ultra-fine particulate matter, as a critical climate forcing agent and indicate that reducing these short-lived emissions may be among the most effective strategies for slowing global climate change, in particular, Arctic warming, in the near term. Including black carbon in the reporting rule would provide EPA with valuable data it needs to develop mitigation measures to rapidly reduce these emissions, without imposing significant additional administrative or cost burdens on regulated entities. Black carbon is the light-absorbing, carbonaceous component of soot, and is a combustion by-product of inefficient burning of fossil fuels, biofuels, and biomass.[footnote: 242 Ramanathan, V., Carmichael, G., Global and Regional Changes Due to Black Carbon, 1; NATURE GEOSCIENCE, 221, 221 (2008) (Ex. 27).] Black carbon's direct climate forcing occurs when the particles absorb sunlight and release that energy as heat into the atmosphere.[footnote: 243 See, e.g., id.; see also Schwarz, J., et al., Coatings and their enhancement of black carbon light absorption in the tropical atmosphere, J. GEOPHYS. RES. 113, DO3203, 1 (2008) (Ex. 28).] Black carbon is also a potent climate warming agent when deposited on snow and ice, and is now thought by many scientists to be responsible for perhaps half of observed Arctic warming, and may be the second most important climate forcing agent after carbon dioxide. [footnote: 244Quinn, P. K., et al., Short-lived pollutants in the Arctic: Their climate impact and possible mitigation strategies, ATMOS. CHEM. AND PHYS., 8, 1723, 1728 (2008) (Ex. 29) 244]] Because black carbon is a short-lived climate forcing agent with an atmospheric residence time of only days or weeks, reducing these emissions is among the most effective strategies for mitigating global warming in the near term. [footnote: Jacobson, M., Testimony for the Hearing on Black Carbon and Arctic, House Committee on Oversight and Government Reform United States House of Representatives, Oct. 18, 2007, available at http://oversight.house.gov/documents/20071018110606.pdf (concluding that control of black carbon "appears to be the fastest method of slowing global warming for a specific period") (Ex. 30) ; see also Bond, T.C., Testimony for the Hearing on Black Carbon and Climate Change, Oversight and Government Reform Committee, U.S. House of Representatives, October 18, 2007, available at http://oversight.house.gov/documents/20071018110647.pdf (Ex. 31).] And because black carbon is a potent climate forcing agent on ice and snow, addressing these emissions could slow Arctic warming almost immediately and, in effect, buy critical time for the implementation of measures to reduce long-lived greenhouse gases and help avoid some of the worst consequences of Arctic warming such as the rapid and uncontrolled release of methane and carbon as permafrost melts, and rising sea levels resulting from the melting of the Greenland ice sheet. [footnote: Lenton, T., et al., Tipping elements in the Earth's climate system, PNAS, 105,

6, 1786, 1789 (2008) (Ex. 32).] Despite these facts, EPA proposes to exclude black carbon from the reporting rule based solely on a 2005 report by the National Academy of Sciences, Radiative Forcing of Climate Change: Expanding the Concept and Addressing Uncertainties. In doing so, EPA is ignoring more recent and conclusive scientific data. It has given no rational explanation for doing so. Since 2005, dozens of studies have shown that black carbon has positive radiative forcing effects both at the top of the atmosphere and when deposited on ice and snow. [footnote: See, e.g, Quinn, P., et al., supra n. 244, Short-lived pollutants in the Arctic: Their climate impact and possible mitigation strategies, ATMOS. CHEM. PHYS. at 1726 ; Ramanathan, V., Carmichael, G., supra n. 242 Global and Regional Changes Due to Black Carbon, 1 NATURE GEOSCIENCE, at 222-223.] Scientists at NOAA and NASA have recently concluded that black carbon is the second most powerful contributor to Arctic melting after CO_2.[footnote: Quinn, P., et al., supra n. 244, The climate impact of short-lived pollutants in the Arctic, ATMOS. CHEM. PHYS. At 1726.] In fact, a draft report co-authored by EPA's own scientists recently concluded that black carbon "may be exerting a significant anthropogenic warming effect on the climate," and that "mitigation of [black carbon] emissions therefore has the potential to slow the rate of warming in the Arctic in the next few decades." [footnote: Sarofim, M. et al., Current policies, Emission Trends and Mitigation Options for Black Carbon in the Arctic Region, Draft Working Paper of the Ad Hoc Working Group, unpublished, at 2 (2009) (Ex. 33).] While uncertainty remains as to the net atmospheric climate effects of carbonaceous aerosols from the combustion of biofuel and biomass, it is now known with high confidence not only that carbonaceous aerosols from the combustion of fossil fuels are net positive climate forcers, but also that the black carbon component of aerosols from all sources causes significant climate warming when deposited on ice and snow. [footnote: Id. at 17 (noting that Koch, et al. 2007 calculated a net positive forcing from the direct effect of European organic matter due to significant Arctic transport).; Id. at 17 (indicating that fossil fuel sources have higher black carbon to organic carbon ratios); see also Bond, T., et al., A Technology-Based Global Inventory of Black and Organic Carbon Emissions From Combustion, JOURNAL OF GEOPHYS. RES. D1 4203 (2004) (Ex. 34).; Flanner, M. et al., Springtime warming and reduced snow cover from carbonaceous particles, ATMOS. CHEM. PHYS. DISCUSS., 8, 19820, 19822 (2008) (Ex. 35); Quinn, P., et al., supra n. 244; Hansen, J., Nazarenko, N., Soot climate forcing via snow and ice albedos, PNAS 101 (2) 423-428 (2004) (Ex. 36); Shindell, D., et al., A multi-model assessment of pollution transport to the Arctic, ATMOS. CHEM. PHYS., 8, 5353, (2008) (Ex. 37); Shindell, D, and Faluvegi, G., Climate response to regional radiative forcing during the twentieth century, NATURE GEOSCIENCE, 2, 294, 298 (2009) (Ex. 38); Ramanathan, V., Feng, Y., Air pollution, greenhouse gases and climate change: Global and regional perspectives, ATMOS. ENVIR., 43 (2009) (Ex. 39); Flanner, M., et al., Present-day climate forcing and response from black carbon in snow, JOURNAL OF GEOPHYS. RES., 112, D11202, 15 (2007) (Ex. 40); Jacobson, M., supra n. 245; Zender, C., Arctic Climate Effects of Black Carbon, Testimony for the Hearing on Black Carbon and Arctic, House Committee on Oversight and Government Reform United States House of Representatives, Oct. 18, 2007, available at: http://oversight.house.gov/documents/20071018110919.pdf (Ex. 41). Moreover, in proposing to exclude black carbon from the reporting rule, EPA suggests, without scientific basis, that the suite of diesel rules, including the Highway Diesel Rule and Nonroad Diesel Rule, are adequate to reduce the climate forcing effects of black carbon and to protect the public welfare.254 While the diesel rules may reduce black carbon emissions in the future, EPA ignores the fact that their efficacy is seriously limited by the timeframe in which the rules will become effective: Many of the standards in these rules do not phase in fully for new engines until 2015. Moreover, their benefits will accrue incrementally only over a long period after that due to the slow turnover of older engines. Finally, with the exception of rebuilt heavy duty engines, the rules do not require any additional black carbon emissions reductions in the existing, or "legacy," fleet of diesel

vehicles, which have long life spans. Given that rapid reductions in black carbon are essential to slowing dangerous climate change, other actions are urgently required. [footnote: Although the health impacts of black carbon/fine particle emissions are not the focus of these comments, it is clear that they are not sufficiently addressed by the current rules. EPA states on its website that "[e]ven with the new diesel rules, millions of diesel engines already in use will continue to emit large amounts of nitrogen oxides, particulate matter and air toxics, which contribute to serious public health problems. These emissions are linked to thousands of premature deaths, hundreds of thousands of asthma attacks, millions of lost workdays, and numerous other health impacts every year." National Clean Diesel Campaign, www.epa.gov/cleandiesel, September 2008.; nonroad Diesel Rules, 69 Fed. Reg. 38,957 (June 29, 2004).] Including black carbon in the reporting rule would provide EPA with a comprehensive inventory of the sources of black carbon and the amount of emissions – which is essential for EPA to take such swift action. Given the significant threat presented by black carbon emissions – and the immediate climate benefits associated with reducing them – interest in addressing black carbon both in the United States and around the world is growing. For example, the America Clean Energy and Security Act of 2009, if adopted, would require EPA to identify the major sources of black carbon emissions in the United States within 18 months of enactment, and within two years, either to adopt final rules regulating these sources or to find that the existing Clean Air Act regulations adequately regulate black carbon emissions. [footnote: 258 H.R. 2454 (Waxman-Markey substitute amendment), 111th Cong., §§ 333, 851 (a)-(b) (2009).] In addition, other members of Congress have recently introduced stand alone black carbon bills which would require EPA to take immediate action to address black carbon. [footnote: 259 Black Carbon Emissions Reduction Act of 2009. H.R.1760, 111th Cong. § 2(a) (2009); S. 849, 111th Cong. (2009). 260 For example, the Senate bill would require EPA, within 180 days of enactment of the bill, to summarize available scientific and technical information regarding identification of the major sources of black carbon emissions in the United States and an estimate of the quantity of current and project black carbon emissions, and to identify the most effective control strategies to mitigate such emissions. S. 849 at §§ 3(a)(2)(A),(B); 3(b)(1). The House bill requires EPA, within one year of enactment, to submit a black carbon emissions abatement report to Congress that includes an inventory of the major sources of black carbon emissions in the United Sates and globally, and effective and cost-effective control technologies, operations, and strategies for black carbon emissions reductions. H.R. 1760 at § 2(d). It also requires EPA, within one year of enactment, to either propose regulations under the Clean Air Act to reduce black carbon emissions or find that the existing Clean Air Act regulations adequately regulate black carbon emissions, and to finalize these rules or its finding within two years. Id. at § 2(e).] All three bills would require EPA to collect data on the main sources of black carbon – data that could be collected within the framework of the reporting rule. Thus, there is no rational justification for leaving black carbon out of the reporting rule and delaying this critical reporting. Clearly, the public and policymakers are looking for this data as soon as possible and thus requiring it to be reported now would serve EPA's stated purpose of providing data useful now in the policy process. Requiring manufacturers of new vehicles and engines to report black carbon emissions would not expand the scope of the regulated community under the reporting rule because these manufacturers are already included in the rule. These include manufacturers of nonroad and onroad diesel vehicles and engines, the largest sources of black carbon emissions in the United States. [footnote: Sarofim, et al., supra n. 250 Current policies, Emission Trends and Mitigation Options for Black Carbon in the Arctic Region at 2; see also Battye, W., et al., Methods for Improving Global Inventories of Black Carbon and Organic Carbon Particulates, EC/R Inc. and U.S. EPA (2002), (Ex. 42)] Manufacturers of aircraft engines, another important source of black carbon particularly when operating in northern latitudes, are also required to report under the proposed rule. Moreover, requiring manufacturers already included in the rule to also monitor and report black carbon

emissions when certifying new engines would not impose a substantial administrative or reporting burden on industry. Most manufacturers of onroad and nonroad engines already collect data on gravimetric PM and using quartz filters can calculate the elemental carbon (i.e., black carbon) to organic carbon ratio of their engine emissions. In addition, many manufacturers already know the EC/OC ratio of their engine emissions (e.g., 75/25 for 4-stroke engines and 60/40 to 50/50 for 2-stroke engines) and could estimate total black carbon emissions with a relatively high degree of accuracy. While manufacturers of category 3 marine diesel engines are not currently required to report PM emissions, a possible interim method would be for them to conduct gravimetric PM compliance tests with EC/OC analysis and to install opacity CEMS on vessels, or to conduct tests using specific types of fuels. A more accurate assessment of black carbon emissions from US mobile sources, however, will require supplementing data on black carbon emissions from new engines with data on emissions from the existing fleet. As EPA correctly recognizes, the provisions of the reporting rule applicable to mobile sources are of limited utility because they apply only to "new" vehicles and engines. Thus, the significant greenhouse gas emissions from the existing vehicle fleets will necessarily be excluded: Travel activity and other emissions-related data from State and local governments and fleet operators are critical to understanding the overall GHG contribution of the mobile source sector. These data serve the important role of reflecting real-world conditions and capturing activity levels (e.g., distance traveled and hours operated) from all vehicles and engines, which can complement data that manufacturers report on expected emissions rates from new vehicles and engines. We agree in full with EPA's conclusions regarding the importance of in-use data from existing mobile sources. Obtaining this information is essential for the development of effective climate change mitigation policies. As EPA recognizes, existing voluntary programs, such as Smartway Transport Partnership Program, could be used to allow EPA to collect valuable information from fleet operators regarding actual or estimated black carbon emissions. We encourage EPA to incorporate into these existing programs incentives for fleet operators to monitor and report their black carbon emissions. Alternatively, should EPA determine that such a voluntary action is impractical or unlikely, EPA should establish internal procedures to determine black carbon emissions from the data already provided by fleet operators under these programs and provide for the inclusion of these results in the rule's emissions inventory. Finally, we encourage EPA to examine how it may gain useful information regarding black carbon emissions from existing mobile sources from information that the states currently gather. Available data indicate that certain stationary sources also emit black carbon, albeit in smaller amounts. Because black carbon is a byproduct of the incomplete combustion of fossil fuels, such emissions are particularly likely to occur in older, less efficient industrial boilers and furnaces – sources that are less likely to be covered by this proposed reporting requirement. However, in the event that there are black carbon-emitting sources that trigger the reporting rule, we propose that EPA require all facilities covered by the proposed reporting rule to report black carbon emissions associated with the combustion of fossil fuels, or demonstrate they qualify for an exclusion. Options for exclusion would be to create an "automatic" exclusion from the black carbon reporting requirement for facilities or processes that do not undertake combustion activities or require any covered units that are out of compliance for PM control to be subject to a black carbon reporting requirement, until such a time as they are in compliance for PM standard. In addition, as discussed in Section II.C above, EPA may also want to consider whether a lower reporting threshold (<25,000 Mt CO_2e) needs to be set in order to capture sources with significant black carbon emissions.

Response: Regulation of black carbon from mobile sources is outside the scope of this rule. We note, however, that we currently have PM standards for many mobile source categories; we plan to respond to petitions to address black carbon emissions from marine and aviation sources; and

we are pursuing black carbon mitigation through retrofits of existing fleets as part of the National Clean Diesel Campaign.

In terms of mobile source black carbon reporting, EPA currently receives data on PM (which can be, but is not always, a good determinant of black carbon) from many diesel engine manufacturers at the time of engine certification and we are planning to work with diesel retrofit technology manufacturers to better understand the black carbon reduction potential from their technologies. At this time, we have determined that PM measurement methods to be used for routine reporting of black carbon are not adequately robust for other mobile sources outside of the manufacturer categories that are currently measuring PM for certification and verification purposes. For these reasons as well as those discussed in the response to comment EPA-HQ-OAR-2008-0508-1019.1, excerpt 1, we are not finalizing any new reporting requirements for vehicle and engine manufacturers related to black carbon in this rule. As proposed, we are not requiring fleet operators or states and local governments to report any travel activity or other mobile source GHG emissions-related data in this final rule (see the response to comments EPA-HQ-OAR-2008-0508-1062.1, excerpt 40 and EPA-HQ-OAR-2008-0508-0715.1, excerpt 1 in the separate mobile source comment response document volume).

Regarding the comment that collecting information on black carbon in this rule will allow EPA to administer a bill pass by the House this summer, the purpose of the rule is to collect GHG emission data to help inform EPA's evaluation of existing CAA options for addressing GHG emissions and climate change. Although the information may also prove useful for assessment of future statutory requirements, that is not the purpose for collecting the data at this time. As future climate policy is developed, EPA may revise reporting requirements under this rule and/or will provide more specific guidance to regulated entities.

Commenter Name: J. Randall Curtis MD
Commenter Affiliation: American Thoracic Society (ATS)
Document Control Number: EPA-HQ-OAR-2008-0508-0510.1
Comment Excerpt Number: 1

Comment: The American Thoracic Society is disappointed that black carbon was not proposed as a reportable greenhouse agent. We believe the case for including black carbon as a reportable agent is compelling. 1) While there are research studies showing that the warming effect of black carbon varies by the particle composition, on balance black carbon is a warming agent. We believe the EPA overstates the uncertainty surrounding the warming effect of black carbon as demonstrated by the number of research studies that document the warming effect of black carbon. [See submittal for references provided by commenter] 2) Black carbon is a significant source of emission in the U.S., primarily through diesel fuel burning. While we appreciate that EPA is addressing black carbon through other Clean Air programs, this does not reduce the importance of black carbon as a warming agent. 3) Black carbon is easily reportable. As demonstrated by the NAAQS for particulate matter, both the technology and monitoring network exist for major sources of black carbon to report their emissions. 4) Reducing black carbon will have an immediate positive impact on the environment. Unlike GHG where there is significant delay between the reduction and the intended climate effect, reductions in black carbon emissions will have an immediate positive effect on the environment – as well as positive impacts on respiratory health. The ATS views EPA GHG reporting regulation as a precursor for either EPA initiated or Congressionally mandated regulation of climate change agents. By taking action on reporting black carbon emissions now, EPA will be well poised to request future

reductions in black carbon emissions in the U.S. We note that the opportunities for addressing the climate effects of black carbon in China, India and the developing world are even more encouraging. We believe EPA's inclusion of black carbon in the GHG reporting rule would help send a positive message to our global partners on climate change. For these reasons, ATS urges EPA to include black carbon as a reportable climate change agent.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1019.1, excerpt 1.

Commenter Name: Dale E. Furrow
Commenter Affiliation: The George Washington University School of Public Health MPH Candidate
Document Control Number: EPA-HQ-OAR-2008-0508-0219.1
Comment Excerpt Number: 1

Comment: The preamble to the proposed rule states that changes in water vapor concentrations are not an initial driver of climate change, but rather an effect of climate change which then acts as a positive feedback that further enhances warming. However water, which is not classified as a pollutant under the Clean Air Act, could account for as much as 95% of the greenhouse effect causing the observed warming. There is no consensus in the scientific community on the magnitude of the human contribution to atmospheric water vapor concentrations. Though minor in comparison to natural water vapor sources, it is clearly understood that combustion of hydrocarbons produces water as a by-product. The preamble to the proposed rule also states that human activities have negligible effect on atmospheric water concentrations. However, because water vapor is not listed as a pollutant it has never been monitored and reported and thus the exact contribution is unknown. If the human contribution to the atmospheric levels of water vapor was as much as 1%, considering the impact water vapor has on the overall greenhouse effect, the human contribution of water vapor in the atmosphere could have as large of an impact (or larger) as the other pollutants listed in the rule. Without the data to test this theory, there is no way to know for sure.

Response: The final rule retains the exclusion of water vapor from the selected GHGs to report. The rationale to exclude water vapor is clearly stated in section IV.A of the preamble to the proposed rule (74 FR 16464, April 10, 2009). In response to the specific points raised by the commenter, water vapor is not responsible for 95% of the total greenhouse gas effect but rather around 60% in clear conditions and 72% in cloudy conditions (Kiehl & Trenberth, BAMS, 1997). Water produced as a byproduct of combustion at low altitudes has a negligible contribution to climate change by first principles. The residence time of water vapor is very short (days) and the water content of the air in the longer term is a function of temperature and partial pressure, with emissions playing no role. Additionally, the radiative forcing of a given mass of water at low altitudes is much less than of the same mass of CO_2. Water produced at high altitudes does potentially have a larger impact: the IPCC Fourth Assessment Report estimated the contribution of changes in stratospheric water vapor due to methane and other sources, as well as high altitude contributions from contrails, but concluded that both contributions were small, with a low level of understanding. The report also addressed anthropogenic contributions to water vapor arising from large scale irrigation, but assigned it a very low level of understanding, and suggested that the cooling from evaporation might outweigh the warming from its small radiative contribution. The IPCC states that the emissions from combustion sources are small in comparison: "The emission of water vapour from fossil fuel combustion is significantly lower than the emission from changes in land use (Boucher et

al., 2004)." (IPCC 4th Assessment Report, Working Group I, pg 185). . For these reasons, and because EPA did not propose any methodologies for calculating water vapor emissions, after reviewing this comment, EPA has determined that the final rule should not require reporting of water vapor at this time.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 66

Comment: In developing a reporting unit's CO_2 equivalents, EPA used the IPCC's recommendations for the Global Warming Potentials for a number of compounds. The total CO_2 equivalent emissions from regulated sources are the sum of the CO_2 equivalent of each of the regulated greenhouse gas compounds. Sources emitting more than 25,000 tonnes per year of CO_2 equivalent would be subject to reporting. For the combustion sources category, EPA did not consider the complete set of significant contributors to any source's Global Warming Potential. In the simplest combustion model, stoichiometric amounts of carbon dioxide and water vapor are generated. For any fossil fuel containing carbon-hydrogen bonds, complete combustion will provide stoichiometric amounts of water. For the most basic of carbon-based fuels, methane, two moles of water are generated for every one mole of carbon dioxide. Considering that no combustion source provides complete combustion and that atmospheric nitrogen contributes to N_2O formation at temperatures typical at industrial combustion sources, EPA proposed that sources include these minor contributors to the overall CO_2 equivalent emissions. However, considering the amount of water vapor generated from fuels containing hydrogen, NPRA continues to assert that EPA must include water vapor in any policy decisions affecting combustion sources. NPRA believes that this is a very important policy decision, particularly in light of many widely accepted scientific models, studies and reports (see http://www.ipcc.ch/ipccreports/sres/aviation/index.htm, http://www.epa.gov/otaq/regs/nonroad/aviation/contrails.pdf, http://www.warwickhughes.com/papers/barrett_ee05.pdf, http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=090000648 0951 f01, and http://www.oism.org/pproject/GWReview_OISM300.pdf) that provide for the effects of water vapor in predicting climate change from atmospheric concentrations of both naturally occurring and anthropogenic sources of greenhouse gases. From a stoichiometric basis, because there are typically two moles of water vapor produced for every mole of carbon dioxide produced when combusting methane, this suggests that a doubling of the reporting threshold to 50,000 tonnes per year of CO_2e is warranted. We noted that in all the scenarios where EPA considered reporting thresholds, water vapor's contribution to the global warming potential of fossil fuels' combustion emissions was not considered. NPRA believes that any policy decisions relying on predictive climate models must include water vapor and other potential GHGs. Earlier EPA publications (2002), IPCC reports (1999), and other scientific publications recognized the significance of water vapor's contribution to global warming models. NPRA is unable to discern, from the documents made available as part of the rulemaking docket, EPA's rationale for not adopting a Global Warming Potential for water vapor. Further, in proposing the set of compounds that are part of the greenhouse gases that regulated entities will be required to report, EPA did not provide any basis for why water vapor and other atmospheric species are not included in the set of compounds contributing to climate change as part of the combustion of fossil fuels.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0219.1, excerpt 1.

Commenter Name: G. H. Holliday
Commenter Affiliation: Holliday Environmental Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0170.1
Comment Excerpt Number: 3

Comment: Water vapor is one the strongest greenhouse gases, because of the heat of vaporization and vast amount of water entering the atmosphere, but EPA does not suggest including water vapor, because "these GHGs … are not covered under any State or Federal voluntary or mandatory GHG program, the UNFCCC or the Inventory of U.S. Greenhouse Gas Emissions". Water vapor is not counted, because it would be difficult to account for all of the evaporation from rivers, lakes, oceans, geysers and volcanic eruptions under the controlled by the U.S. government. In addition, EPA appears not to be interested in controlling water vapor, most likely because water vapor would not be covered by a Cap and Trade plan and thus controlling water is a non revenue generating activity.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0219.1, excerpt 1.

Commenter Name: L. Annetta
Commenter Affiliation: George Washington University School of Public Health
Document Control Number: EPA-HQ-OAR-2008-0508-0255.1
Comment Excerpt Number: 4

Comment: I would oppose water vapor being included on the list of reportable GHGs. While the National Oceanic and Atmospheric Administration (NOAA) states that water vapor is the most abundant GHG, there is a climate feedback loop that is related to the warming of the atmosphere more than water vapor due to industry is. The IPCC Guidelines do not include water vapor because man-made water vapor does not contribute largely to the change of atmospheric water vapor concentration in a significant amount. The EPA should consider following the IPCC guidelines.

Response: EPA thanks the commenter for their input. As explained in the preamble response on GHGs to report, the final rule covers the same GHGs as the proposal. Regarding the comment on water vapor, the EPA agrees that water vapor should not be included in the final rule - see the response to comment EPA-HQ-OAR-2008-0508-0219.1, excerpt 1.

Commenter Name: L. Annetta
Commenter Affiliation: George Washington University School of Public Health
Document Control Number: EPA-HQ-OAR-2008-0508-0255.1
Comment Excerpt Number: 5

Comment: The EPA should consider including CFCs. After the final rule in 1992 to implement section 604 of the Clean Air Act, CFCs were to be completed phased out of production by 1 January 2000. While they can still be used in certain circumstances, the detection of a significant amount of CFCs may indicate an illegal use. The mandatory reporting of CFCs would ensure that the 1992 rule was in fact in effect and followed.

Response: EPA concluded that ozone depleting substances (CFCs, HCFCs, and halons) are being effectively addressed with non-climate policy mechanisms like the Montreal Protocol on Substances that Deplete the Ozone Layer and Title VI of the CAA. See Section IV.A of the proposal preamble (74 FR 16464, April 10, 2009) for further discussion of these programs. The objective of the final reporting rule is not to ensure that certain gases or aerosols are phased out, but rather to require the reporting of the abundantly emitted anthropogenic GHGS not currently controlled by other mandatory Federal programs for use in developing GHG policies and CAA programs. EPA determined that the proposed selection of GHGs remains sufficient to accomplish this objective. The final rule, like the proposed rule, does not require reporting of CFCs and other ozone depleting substances.

Commenter Name: C. S. Ramirez
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0258
Comment Excerpt Number: 2

Comment: I am disappointed that the agency has chosen to keep certain GHGs out of the regulation and thus not require reporting on their emission. To not include CFCs, HCFCs, halons, tropospheric O_3, and black carbon simply because no other government or international body does is no way of being forward thinking and at the vanguard of the study of climate change. The lack of inclusion of these GHGs, while seemingly justifiable, will inevitably lead to incomplete data. As I mentioned above, our understanding of the causes of climate change is in a state of flux, evolving at a constant pace. Without complete data of what gases are being released into the atmosphere by humans, that understanding will be held back considerably.

Response: The final rule requires reporting of abundantly emitted GHGs that result from human activity: CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6, and other fluorinated compounds. In order to evaluate potential policies and programs under the CAA we determined it was appropriate to start with data collection of these GHGs. As policies evolve and programs are developed we will assess the need for additional data collection. This approach remains consistent with other State or Federal voluntary or mandatory GHG programs, the UNFCCC and the Inventory of U.S. Greenhouse Gas Emissions and Sinks. The IPCC focuses on these gases for both scientific assessments and emissions inventory purposes because they are long-lived, well-mixed GHGs not controlled by the Montreal Protocol as Substances that Deplete the Ozone Layer. After review of public comments and other information, EPA concluded that the final rule, like the proposed rule, should exclude the compounds listed by the commenter. See the response to comment EPA-HQ-OAR-2008-0508-0255.1, excerpt number 5, regarding exclusion of ozone depleting substances (CFCs, HCFCs, and halons). See the response to comment EPA-HQ-OAR-2008-0508-1019.1, excerpt 1 for discussion of why the final rule does not require reporting of tropospheric ozone and black carbon emissions. See the response to comment EPA-HQ-OAR-2008-0508-0219.1, excerpt 1 regarding water vapor.

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2. SELECTION OF THRESHOLDS

Commenter Name: Burl Ackerman
Commenter Affiliation: J. R. Simplot Company
Document Control Number: EPA-HQ-OAR-2008-0508-1641
Comment Excerpt Number: 2

Comment: EPA has proposed 19 sources categories that have no reporting threshold and all other source categories having 25,000 metric tons CO_2e per year threshold. We recommend that all source categories have a 25,000 metric ton threshold. The impact of Green House Gases is the same regardless of what source category is generating the emissions; therefore, all source categories should have the same threshold. In the preamble the following statement is made, "For these facilities, our analysis indicated that all facilities with that source category emit more than 25,000 metric tons of CO_2e per year or that only a few facilities emit marginally below this category." EPA's analysis may be wrong, since they do not have site specific data that facilities have or operating practices which may change in the future reducing GHG emissions. These facilities should not be held to a higher requirement than other source categories and should have the same threshold level.

Response: See generally the Preamble, Section II.E. for a discussion of thresholds. As explained in the proposal preamble (74 FR 16469, April 10, 2009) EPA's analysis indicated that all facilities in the source categories listed in Section 98.2(a)(1) emit more than 25,000 metric tons of CO_2e per year or that only a few facilities emit marginally below this level. Given that almost all of these facilities surpass the 25,000 mt CO_2e threshold, EPA designated these "all-in" source categories to simplify applicability determination while achieving very similar results to a 25,000 metric ton threshold. It should be noted that the number of "all-in" source categories has decreased from 19 because the final rule requires reporting from fewer source categories than initially proposed. In addition, EPA considered source category-specific facility information or emissions data provided by the commenters to determine changes to our proposed approach were warranted for individual source categories. See the preamble sections on the relevant source categories for discussions of any changes to source category-specific applicability/thresholds made in the final rule as a result of such comments. In response to comments, EPA also added a provision to the final rule that allows facilities to cease reporting if their reported emissions for multiple years are below a specified level. See the preamble for details on this provision to cease reporting, which applies to all source categories regardless of whether they were "all in" or had an applicability threshold.

Commenter Name: Burl Ackerman
Commenter Affiliation: J. R. Simplot Company
Document Control Number: EPA-HQ-OAR-2008-0508-1641
Comment Excerpt Number: 6

Comment: We also suggest that EPA raise the regulatory threshold for all facilities to 100,000 metric tons CO_2e per year. In EPA's presentation by the Climate Change Division Office of Atmospheric Programs presented to the National Mining Association May 2009, EPA's analysis shows that going from 25,000 mt CO_2e Hybrid to a 100,000 mt CO_2e threshold reduces the covered facilities by 6,607 facilities, but only reduces the covered emissions by 2.5%. Raising

the threshold to 100,000 still achieves broad emission coverage, but significantly reduces the regulatory burden on the regulated community and in turn would lessen the economic impact.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Burl Ackerman
Commenter Affiliation: J. R. Simplot Company
Document Control Number: EPA-HQ-OAR-2008-0508-1641
Comment Excerpt Number: 1

Comment: In the preamble under C. Rationale for Selection of Thresholds the following statement is made, "The three exceptions to the 25,000 metric ton of CO_2e threshold are electricity production at select units subject to existing Federal programs, fugitive emissions from coal mining, and emissions from mobile sources." In Section 98.2(a)(1) of the rule there are 19 source categories that have no threshold, much less 25,000 metric tons. Please explain this discrepancy with the preamble.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2. Regarding the "discrepancy" pointed out by the commenter, the 19 source categories in proposed 40 CFR 98.2(a)(1) are the all-in source categories and the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2, explains how they are consistent with the 25,000 metric ton threshold.

Commenter Name: Dr. James J. Pletl
Commenter Affiliation: Hampton Roads Sanitation District (HRSD) Technical Services Division
Document Control Number: EPA-HQ-OAR-2008-0508-1743
Comment Excerpt Number: 1

Comment: HRSD thinks that the reporting threshold being set at 25,000 TPY of CO_2 equivalent GHGs is acceptable.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Robert E. Murray
Commenter Affiliation: Murray Energy Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-1577
Comment Excerpt Number: 4

Comment: The Rule sets a minimum reporting threshold of 25,000 tons of carbon dioxide equivalent ("CO_2e "). We believe that the reporting threshold should be set at 100,000 metric tons of CO_2e. Table VII-2 in the Preamble indicates that this would only reduce the emissions reported to the registry by a mere four percent (4%), but would reduce the number of affected entities by fifty percent (50%). By raising the reporting threshold and clarifying how the reporting is done, EPA will greatly reduce the economic burden on covered entities that will ultimately be passed on to consumers.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Bob Dinneen
Commenter Affiliation: Renewable Fuels Association (RFA)
Document Control Number: EPA-HQ-OAR-2008-0508-0494.1
Comment Excerpt Number: 4

Comment: For the Proposed Rule, EPA evaluated thresholds of 1,000, 10,000, 25,000 and 100,000 mt CO_2e per year. While EPA appropriately declined to propose a threshold below 25,000 due to the substantially increased burdens compared to the little benefits, EPA glosses over the fact that the 100,000 threshold would retain virtually the same coverage. The majority of source categories identified by EPA would still have well over 90% of emissions from that source category covered under the 100,000 threshold. TSD for Reporting Thresholds, Table 5-8. (As previously noted, EPA provides no emissions estimates for ethanol production facilities.) In fact, EPA estimated that at the 100,000 threshold, the median share of entities covered falls to 66%, but the median share of emissions covered remains high at 98%. See EPA, Regulatory Impact Analysis for the Mandatory Reporting of Greenhouse Gas Emissions Proposed Rule (GHG Reporting), Final Report, at 4-119 (Mar. 2009). Thus, EPA appears to be targeting a substantial number of facilities that have insignificant contributions to the national total of GHG emissions. This is counter to EPA's stated goal of the reporting rule -- to focus on significant sources of GHG emissions. As such, EPA should raise the threshold to 100,000. (It is unknown if this threshold could even be higher and retain similar coverage, because EPA only provides estimates 25,000 and then 100,000.) One alternative for EPA to continue to obtain information on these smaller sources is to provide for voluntary reporting for facilities below this threshold, or to provide a phase-in of reporting requirements as noted in Section IV of these comments.

Response: See the preamble for the response on selection of the threshold. Regarding the suggestion to phase in reporting requirements, collection of accurate emissions data on facilities above the selected threshold is important to enable quantitative analysis of potential policies and development of programs. Phasing in reporting for sources smaller than 100,000 metric tons would result in the data not being received until 2012 or later, which would likely be too late for many ongoing GHG policy and program development needs. For comments on allowing voluntary reporting by smaller sources, see the comment response document volume on the general monitoring approach and other general rationale comments.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2008-0508-0513.1
Comment Excerpt Number: 47

Comment: A 25,000 metric tons per year (MT CO_2e /year) reporting threshold for stationary sources is far too low to capture efficiencies in the reporting program and is not supported by data and analysis in the record. In its data analysis, EPA considered only low-end thresholds (1,000; 10,000; and 25,000 MT CO_2e) and a high-end threshold of 100,000, but no threshold between 25,000 and 100,000. This gap in the data analysis of between 25,000 and 100,000, makes EPA's selection of 25,000 irrational. EPA dismissed 10,000 for the threshold on the basis that a 10,000 threshold rather than 25,000 would capture only 1% more of the emissions. 74 FR 16468. The same reasoning applies equally to using 25,000 rather than 100,000, which doubles the number of reporting entities but captures only 2.5% more of the emissions, as noted in EPA's

chart “Estimated Proposal Coverage: Facility and Downstream Coverage by Threshold,” presented to the Small Business Administration Roundtable on April 3, 2009. EPA admits it lacks information about the sources that will be impacted by adopting its proposed threshold: "In particular, [the 25,000 metric ton threshold] would address the considerable uncertainties in the 25,000 to 100,000 metric tons CO_2e emissions range, both as to the number of reporters and the magnitude of emissions. EPA believes that a 25,000 metric tons CO_2e threshold would help in gathering data from a reasonable number of reporters for which little information is currently known without imposing undue administrative burden." 74 FR 16482. Given the inconsistency in treating the data in establishing a threshold, and the lack of a supporting rationale based on data, EPA should do additional data gathering and analysis, including for some median threshold amounts between 25,000 and 100,000 MT CO_2e, and establish a reporting threshold above 25,000 that is rational and based on record support. Then, as EPA gathers data from covered sources, if data later demonstrate a lower threshold is necessary and beneficial, EPA can amend the program to cover additional sources. This approach will reduce the burden and costs for smaller facilities without dedicated staff to conduct the data analysis and reporting. Because the additional burden between 25,000 and 100,000 MT CO_2e /year is on smaller sources, the greatest potential means of decreasing GHG emissions from these sources is to encourage them to direct their resources toward energy efficiency and other GHG emission reduction measures rather than toward contracting with third-party data collection and reporting services.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0494.1 excerpt 4 regarding the suggestion on phasing. EPA also notes that the rule does not require reporting facilities to contract with third party services. EPA intends to provide outreach and guidance materials and an electronic reporting system to help reduce the burden on reporters. For discussion of compliance materials, tools, and outreach, see the preamble section on “determining applicability” (under the summary of comments and responses on other rule requirements), as well as the preamble section and comment response document volume on compliance and enforcement. See the preamble economic impacts section for the analysis of impacts on small businesses for the final rule. Also note that “small facilities” in the context of this rule, are not necessarily small businesses. A facility can be “small” based on its level of GHG emissions, but still be a large business.

Commenter Name: Jerry Call
Commenter Affiliation: American Foundry Society (AFS)
Document Control Number: EPA-HQ-OAR-2008-0508-0356.2
Comment Excerpt Number: 5

Comment: A reporting threshold of 100,000 tons of GHG emissions for those facilities that do not contain any of the listed source categories would appear to strike a more appropriate balance between the amount of GHG emissions reported, while excluding more small emitting facilities. First, EPA concludes that the source categories listed in the proposed rule emit the highest percentage of GHG emissions in the U.S. Second, the difference in the amount of total GHG emissions in the U.S. that would be reported between the 25,000 ton threshold and the 100,000 ton threshold is only two percent. The 100,000 ton threshold would also eliminate the reporting burden for another 6,500 facilities (most of which would be small businesses, including many foundries) at an annual regulatory cost savings of approximately $60 million. Given the severe economic challenges currently facing the metal casting industry, and U.S. manufacturing in general, the 100,000 ton reporting threshold appears to be a much better regulatory option for those facilities that do not contain any of the listed source categories. At the 100,000 ton

reporting threshold, there is only a very small incremental reduction in the amount of total GHG emissions in the U.S. that are reported (i.e., only two percent). In addition, there would be a significant regulatory burden reduction for 6,500 additional facilities (i.e., 50 percent incremental reduction) and a significant regulatory cost savings of $60 million (i.e., 40 percent incremental cost savings). The 100,000 ton reporting threshold would, therefore, significantly reduce the regulatory burden of the rule without excluding any significant amount of GHG emissions reporting. This is particularly true for those 6,500 small emitting facilities that are only responsible for the two percent increment of GHG emissions that would be reported.

Response: See the preamble for the response on selection of the threshold. Under this threshold, EPA has considered the economic impact of the final rule on small entities and concluded that this action will not have a significant economic impact on a substantial number of small entities. Complete documentation of the analysis can be found in the Final Regulatory Impact Analysis (RIA), Section 5.2.

Commenter Name: Leslie Sue Ritts
Commenter Affiliation: National Environmental Development Association
Document Control Number: EPA-HQ-OAR-2008-0508-0504.1
Comment Excerpt Number: 7

Comment: NEDA/CAP generally supports EPA's proposed threshold of 25,000 metric tons with the reservations expressed immediately below regarding earlier agency analyses that supported a higher applicability threshold. Nevertheless, NEDA/CAP agrees with EPA's assertion that a lower applicability threshold would affect a large number of additional facilities that may not have the resources to support the proposed recordkeeping requirements. In regard to the lower thresholds the Agency considered (i.e., 1,000 and 10,000 metric tons per year), we agree with the Agency's assessment that although both broaden national emissions coverage, [they] do so by disproportionately increasing the number of affected facilities (e.g., increasing the number of reporters by an order of magnitude in the case of a 1,000 metric tons CO_2e /yr threshold and doubling the number of reporters in the case of a 10,000 metric tons CO_2e /yr threshold. Id., at 16,468). The Agency has established that the environmental benefit of including such facilities in the program would be minimal and therefore is not reasonable. It appears from discussions with stakeholders over the past year that EPA considered and then discarded the option of applying the mandatory reporting requirements in the proposed rule to sources that emit or exceed 100,000 tons per year of CO_2e. Without further explication in the agency's final rulemaking action, this appears to be an unreasonable decision. According to the agency's historical analysis, the decision of applying a 25,000 ton applicability threshold would be unwarranted because according to EPA calculations, which others have replicated and agreed with, a 100,000 CO_2e threshold both minimizes industry reporting burden and reduced government data review costs with very minimal impact on overall EPA goals. EPA's data analysis for "Downstream Facility and Emissions Coverage," shows that 13,000 facilities (54.9% of emissions) are covered by a 25,000 tpy threshold while only 6600 facilities (52.4% of emissions) are covered by a 100,000 tpy threshold [See submittal for diagram provided by commenter]. So by selecting the lower reporting threshold of 25,000 metric tons CO_2e increases coverage of downstream facility emissions by only 2.5%, the proposal appears to double the number of facilities that must report into the program. EPA could therefore cut continuing costs for the program in half with almost no loss in data. A detailed rebuttal of this earlier EPA assessment should be included in the final rulemaking.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Rechelle Holloway
Commenter Affiliation: Tyson Foods, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0379.1
Comment Excerpt Number: 6

Comment: Based on emission levels calculated from Tyson facility, we propose a threshold >50,000 CO_2e tpy seems more reasonable in minimizing the number small meat processing facilities and reducing the burdensome reporting as well as minimizing the financial trickle down effect to consumers. This level of threshold will still allow EPA to obtain the significant GHG emitters.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Joseph J. Croce
Commenter Affiliation: Virginia Manufacturers Association (VMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0526.1
Comment Excerpt Number: 6

Comment: By establishing a reporting threshold of 25,000 t CO_2e the proposed rule establishes an arbitrary reporting requirement. The VMA supports a comprehensive, economy-wide federal GHG registry; however, the proposed registry utilizes an arbitrarily low reporting threshold not based on science. It is not clear why 25,000 t CO_2e is a preferred threshold to 25,500 t CO_2e or 30,000 t CO_2e. The EPA states in its proposal that its goal is to maximize the amount of emissions reported while excluding small emitters altogether. However, analysis of the manufacturing sector illustrates that mandating reporting requirements at the 25,000 t CO_2e level would actually bring in facilities that are not classified under existing programs of the Clean Air Act (CAA) as so-called "major sources." It would be burdensome for manufacturing facilities that are not required to report Hazardous Air Pollutants (HAPs), for example, to report their GHG emissions. VMA's primary concern with setting a threshold for reporting in this rule is that the EPA has not based the proposed threshold on science. Without the scientific information about GHG emissions and public health impact, a threshold that is a result of a balancing act of number of facilities covered and the percentage of national emissions covered is devoid of a scientific backbone that is essential in establishing future climate change policy.

Response: See the preamble for the response on selection of the threshold. The selection of 25,000 metric tons was based on analyses and careful consideration of a number of factors as discussed in the preamble, and supporting analyses contained in the docket and is not arbitrary.

Regarding the comment made by this commenter and several other commenters that the GHG reporting rule should apply only to major sources covered under other existing CAA programs (e.g., Title V permitting and NESHAP), the definition of "major source" under those programs is not dispositive of what the appropriate threshold for reporting should be under this rule. Nonetheless, as noted in the final rule preamble, based on our review, EPA has determined that the selected 25,000 metric ton CO_2e threshold will cover many of the types of facilities and suppliers typically regulated under the CAA, while appropriately balancing emission coverage and burden. Some commenters appear to suggest that EPA should apply this rule to all sources

subject to title V, rather than based on facility emissions. However, we are requiring reporting only for those source categories for whom we are providing methodologies in this rule, and commenters approach would require us to develop methodologies for other categories that are subject to title V.

Commenter Name: Sally V. Allen
Commenter Affiliation: Gary-Williams Energy Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0982.1
Comment Excerpt Number: 9

Comment: The facility reporting threshold level should be increased to 50,000 tons of CO_2e per facility. We do not suggest this threshold in the expectation that any SBRs would as a result be exempt from the rule. We believe only that the task of monitoring a much larger regulated community will be onerous, costly and very time-consuming for the agency with little or no commensurate environmental benefit. A reduction in the volume of reporting parties should facilitate administration of these very complex rules for regulated entities.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Jack Gehring et al.
Commenter Affiliation: Caterpillar Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0499.1
Comment Excerpt Number: 11

Comment: The Reporting Rule indicates that EPA's preferred regulatory option is to require sources that emit 25,000 t CO_2e annually (at the company, facility, and in many cases, the sub-facility level) to measure and report such emissions. EPA, to justify its preferred option, considered three alternative emission thresholds (1000, 10,000, and 100,000 t CO_2e, respectively). However, EPA has neither considered nor explained its failure to consider t CO_2e emission reporting thresholds between 25,000 and 100,000 t CO_2e. This failure constitutes inadequate consideration of alternatives to EPA's preferred regulatory option, and undermines the credibility of the methodology used to designate its preferred option, and leads to impractical applications of existing and proposed rules. Had EPA considered raising the threshold to a level above 25,000 t CO_2e, but less than 100,000 t CO_2e, it would have found that the number of covered sources with mandatory registration and reporting obligations could be reduced by almost half, while still capturing more than 82 percent of estimated aggregate GHG emissions. The Reporting Rule's stated objective of maximizing the rule's coverage while keeping reporting burdens to a minimum, and excluding small emitters, could still be met at a threshold between those that EPA did consider. See 74 Fed. Reg. 16467 (April 10, 2009).

Response: See the preamble for the response on selection of the threshold. The commenter did not provide any data or analyses to support their contention that a threshold of 50,000 metric tons CO_2e per year would cut in half the number of facilities reporting, so EPA cannot comment directly on their analyses or assumptions. However, EPA's Regulatory Impact Analysis for the final rule shows that at approximately 10,150 facilities are covered by the selected 25,000 metric ton CO_2e pre year threshold and approximately 6,270 would be covered by a 100,000 metric ton CO_2e per year threshold option. Given this, it is not possible that an intermediate threshold of 50,000 metric tons would cut in half the number of facilities reporting compared to the 25,000

metric ton threshold.

Commenter Name: Traylor Champion
Commenter Affiliation: Georgia-Pacific, LLC (GP)
Document Control Number: EPA-HQ-OAR-2008-0508-0380.1
Comment Excerpt Number: 5

Comment: GP requests increasing the general stationary combustion (GSC) source threshold given under §98.2(a)(3) from 25,000 metric tons of CO_2 equivalents (MT CO_2e) to 50,000 MT CO_2e. As EPA states in the preamble to the proposed rule, the purpose of the stationary combustion source category is to capture significant emitters of GHG while at the same time keeping the number of affected facilities manageable. EPA provided data for four potential thresholds: 1,000, 10,000, 25,000, and 100,000 MT CO_2e, but not the 50,000 MT CO_2e threshold proposed by GP for the GSC source category. GP believes that a 50,000 MT CO_2e GSC threshold would achieve EPA's goal of comprehensive economy-wide coverage of GHG emissions while focusing the reporting efforts on large industrial emitters, and at the same time not having a disproportionate impact on smaller facilities in the commercial sector. As proposed, a 25,000 MT CO_2e GSC threshold equates to a 54 MMBtu/hr unit firing natural gas and would bring numerous process heater units at small commercial operations into the rule. As EPA notes in the preamble, if the GSC threshold were increased to 100,000 MT CO_2e, a decrease of only 1.3% in the amount of emissions to be reported would be expected, based on the estimate of total emissions covered by the program of 3,869.9 million MT CO_2e (preamble Table VIII-1) and the estimates of 170 million MT CO_2e being covered by the GSC category at the 100,000 MT CO_2e threshold and 220 million MT CO_2e being covered at the 25,000 MT CO_2e threshold (preamble Table C-2). Therefore, increasing the GSC threshold to 50,000 MT CO_2e would decrease the total amount of emissions covered under the program by less than 1.3%, yet reduce the number of reporting facilities significantly. Given the fact that the CO_2 emission factor intensity is significantly greater than that of criteria pollutants (i.e., for natural gas the comparative intensity is ~120,000 lb CO_2/MMscf versus 100 lb NO_X/MMscf), the 25,000 MT CO_2e GSC threshold currently proposed would subject many facilities to the GHG reporting rule that would not otherwise be considered a major source under other air regulatory programs. Increasing the GSC threshold to 50,000 MT CO_2e would make it better aligned with other air regulatory programs. GP's request for a 50,000 MT CO_2e GSC threshold would allow for reduced reporting burden at many smaller facilities without a significant decrease in the overall quantity of emissions covered in the proposed rule. If the reporting threshold is increased to 50,000 MT CO_2e per year, the heat input capacity-based threshold in section 98.2(a)(3)(ii) should be adjusted to be consistent with the 50,000 MT CO_2e threshold. GP is not seeking changes for the source category-specific 25,000 MT CO_2e reporting threshold under §98.2(a)(2).

Response: See the preamble for the response on selection of the threshold. Regarding the comment that a 50,000 metric ton CO2e per year would be more consistent with existing air regulatory programs, there are a variety of existing air regulatory programs and most determine applicability based on criteria or hazardous air pollutant emissions. The 25,000 metric ton CO_2e threshold generally covers the same types and categories of sources as existing CAA programs, as discussed in the preamble and supporting documents. However, given the range of cutoffs in existing regulatory programs and the differing relationships between criteria or HAP emissions and GHG emissions for different fuels and industrial processes, not all existing CAA rules equate to 25,000 metric tons GHG emissions. It is true that some natural gas fired combustion units subject to the final GHG reporting rule but might not be subject to other CAA

requirements. However, in response to comments, EPA has simplified GHG emissions calculations for natural gas combustion sources to greatly reduce the reporting burden. For any combustion unit, regardless of size, that burns pipeline quality natural gas, reporters can use simple Tier 1 procedures which rely on fuel use data facilities already collect multiplied by an emission factor contained in the rule. No monitoring instruments or sampling analyses are required. EPA has also taken several other steps to reduce the burden on reporters as discussed in the preamble sections and comment response document volumes on the general monitoring approach and de miminis reporting. Specific changes that reduce the burden for stationary combustion sources and other source categories are described in the preamble section on the relevant source categories. EPA is also providing outreach and applicability tools and guidance as described in the preamble section on "determining applicability" and in the preamble section and comment response document volume on compliance and enforcement. For the response on reporting by commercial and institutional facilities above the threshold, see the response to comment EPA-HQ-OAR-2008-0508-0423.2, excerpt 1. Regarding the comment on major sources, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6.

Commenter Name: Thomas M. Ward
Commenter Affiliation: Novelis Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0561.1
Comment Excerpt Number: 12

Comment: Novelis emphatically urges the EPA to re-evaluate the reporting emission threshold selected for non-listed facilities with the goal of minimizing the industry reporting burden and reducing government data review costs. EPA's data analysis for "Downstream Facility and Emissions Coverage" shows that 13,000 facilities (54.9% of emissions) are covered by a 25,000 tpy emission threshold while only 6600 facilities (52.4% of emissions) are covered by a 100,000 tpy threshold. Therefore, selecting the lower reporting threshold increases coverage of downstream facility emissions reporting by only 2.5%, but doubles the number of facilities that must report into the program. To improve the cost-effectiveness of the reporting program, EPA should reconsider the 100,000 ton threshold in lieu of the 25,000 ton proposal.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: D. Lawrence Zink
Commenter Affiliation: Montana Sulphur & Chemical Company Inc. (MSCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0505.1
Comment Excerpt Number: 5

Comment: All of the thresholds proposed are arbitrary. Why not have the same arbitrary threshold criteria for all facilities and all "persons" other than natural persons. For example, the criteria could simply be emissions of the defined greenhouse gases greater than 25,000 metric tons CO_2e per year. Listing facility types and the combustion heating capacity thresholds seems to unnecessarily confuse the issue. Why consider landfills only at 25,000 tons of CO_2e of methane without consideration of CO_2e from CO_2?

Response: See the preamble for the response on selection of the threshold. Also see the preamble for selection of source categories to report. By requiring reporting for facilities and suppliers that contain listed source categories and general stationary fuel combustion sources

above the specified thresholds, the rule covers over approximately 85 percent of national GHG emissions while minimizing the number or sources that must report. If the rule did not list source categories, many more small facilities would have to determine applicability, even though few such facilities would actually emit over 25,000 metric tons CO_2e per year. Furthermore, under such a broad requirement, the applicability determination and reporting would cover GHG-emitting processes and emission units for which there are not accepted, reliable GHG quantification methods, leading to inconsistency. EPA is not requiring the suggested approach because it would be unnecessarily burdensome for minimal benefit to the program. Regarding consideration of methane and CO2 for landfills, see the landfill comment response document.

Commenter Name: Filipa Rio
Commenter Affiliation: Alliance of Automobile Manufacturers (Alliance)
Document Control Number: EPA-HQ-OAR-2008-0508-0630.1
Comment Excerpt Number: 15

Comment: Based upon review of data within our industry and review of EPA's initial reporting threshold analysis, the Alliance recommends a minimum reporting threshold of 100,000 t CO_2e. The manner in which the reporting threshold is defined will have far-reaching implications and is one of the more significant aspects of the proposed rule. The Alliance agrees with EPA's proposed "hybrid" threshold approach where most facilities are subject to an emissions-based threshold while facilities in a unique situation or subject to an existing reporting program (e.g., Acid Rain Program) would apply a capacity-based threshold. The emission-based threshold approach most likely applies to stationary facilities in our industry. For this reason, the established emissions threshold level will determine the number of affected facilities within our industry. It appears that EPA's goal was to create a threshold which balances the rule's coverage to maximize the amount of emissions reported while excluding small emitters. EPA assessed the costs and emissions associated with various thresholds including 1,000, 10,000, 25,000, and 100,000 metric tons of CO_2-equivalent emissions ("t CO_2e "). Based on this assessment, EPA has recommended a 25,000 t CO_2e annual threshold. At this threshold, EPA suggests over 85% of U.S. emissions would be reported by approximately 13,000 reporters. However, a significant number of facilities (approximately 30,000) would need to assess whether or not to report. The EPA suggests that a threshold of 100,000 t CO_2e would eliminate over 6,600 reporters while the national downstream emissions coverage would only decrease by 2.5%. [See DCN:EPA-HQ-OAR-2008-0508-0630.1 for graph illustrating this point.] While our knowledge of GHG emissions from other industries and sectors is primarily limited to the data EPA presented as part of this rulemaking, we are intimately familiar with emissions within our industry. An analysis of our facilities suggests a proper balance exists at a threshold greater than 25,000 t CO_2e. In fact, a 25,000 t CO_2e threshold will draw in facilities that have not been traditionally considered "significant" or "major" stationary source emitters in terms of criteria and hazardous air pollutant ("HAP") emissions, and are therefore less familiar with the more complicated federal programs such as the Title V operating permit program, Prevention of Significant Deterioration/New Source Review ("PSD/NSR''), and Maximum Achievable Control Technology ("MACT") programs. Since, according to EPA's discussion related to reporting thresholds in the rule's preamble, it is EPA's intent to limit reporting to "large emitters," steering away from these 'small emitters" would be in line with EPA's purpose and intent of the rule. We believe that a 100,000 t CO_2e threshold will more appropriately strike the proper balance of limiting reporting to large emitters while continuing to provide EPA a comprehensive assessment of U.S. emissions. We support a 100,000 t CO_2e reporting threshold for several reasons, as detailed in the following paragraphs. a) Fragmentation More Problematic at Lower Threshold EPA raised

concerns over "fragmentation," particularly with a 100,000 t CO_2e threshold. For the majority of industries, fragmentation will be more problematic at a lower threshold (i.e., 25,000 t CO_2e) as the overall number of reporters appears to be greater around 25,000 t CO_2e. Because EPA has required reporting for "large emitters" in certain industrial source categories regardless of their emissions level, fragmentation is less of an issue at higher emission levels. Rather, fragmentation will be prevalent in industries such as ours where facilities are not part of a reportable source category and do not have emissions substantially higher than the proposed threshold. A significant number of facilities possess emissions at or near 25,000 t CO_2e, which results in greater fragmentation and greater assessments of reporting applicability with little benefit of additional emissions knowledge. b) Heavy Burden on Small Emitters and EPA Opportunities to reduce emissions at facilities with annual emissions at or just above a 25,000 t CO_2e will be relatively limited, and most opportunities that do exist will be relatively straightforward (e.g., lowering/raising thermostats, equipment reprogramming, etc.). As a result, policy dependant upon data reported by facilities of this magnitude will have minimal effect. Therefore, imposing the burden of reporting on these smaller emitting facilities will be unproductive for the current scope and purpose of the rule. Furthermore, the increased burden will extend to EPA and other agencies as a result. Efforts across the board are better dedicated towards reducing emissions and energy use versus reporting. The burden and cost reduction that passes through to EPA as a result of managing less reports could be better used to help fund research, development and implementation of new technologies that will achieve real emission reductions. c) Selection of Appropriate Federal Threshold Harmonizing a reporting threshold with existing state, regional, or national programs (e.g., California's 25,000 t CO_2e threshold) is particularly problematic when scaling it to the entire nation. If an analysis was conducted of each state, it would suggest that a different threshold strikes a proper balance for each particular state. For instance, at a given threshold the relative number of reporters in states located further north will be greater than California (or other states where industry is primarily located in warmer climates) due to greater fuel combustion needs for process and space heating. Additionally, the types of operations and industry will vary greatly from one state to another thus impacting an appropriate threshold. It is also problematic to relate the threshold with any existing regulatory threshold as these particular thresholds show a large discrepancy (e.g., 5,000 - 100,000 t CO_2e). For example, the Canadian GHG National Reporting Program requires facilities that directly emit 100,000 t CO_2e or more (defined as "large emitters") to report annually. EPA must select a reporting threshold that provides equitable distribution and balances the unique geographic emission characteristics considering the interstate and international circumstances. As discussed in detail above, the Alliance recommends a minimum reporting threshold of 100,000 t CO_2e. This particular threshold would better represent "large emitters" for the majority of industry under the existing CAA upon review of the threshold applicability analysis conducted by EPA.

Response: See the preamble for the response on selection of the threshold for the overall response to this comment and to the major points raised.

Regarding fragmentation, the 25,000 metric ton CO2e threshold avoids fragmentation of some of the larger industrial sectors that are typically covered by CAA programs (e.g., lime manufacturing, petroleum refineries) and results in reporting by all facilities in such industries. At least one industry association specifically discussed the desire to avoid fragmentation in meetings with EPA. We acknowledge that the 25,000 threshold fragments some other industries (i.e., results in some facilities needing to report while others are below the threshold and will not report). However, as explained in the preamble response on the threshold, there are multiple reasons for selecting the 25,000 metric ton threshold. A comprehensive GHG emissions dataset for facilities above the threshold across economic sectors is needed to analyze potential policies

and programs under consideration. Having a higher reporting threshold (e.g., 100,000 metric tons) for some sectors to avoid fragmentation of an individual source category would result collection of an incomplete dataset that would not be as useful for policy and program analysis and development.

Regarding reporting by facilities not considered major under other CAA programs, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6. With regard to the comment about placing a large burden on small emitters, EPA has taken several steps to reduce the burden on small combustion sources and on other source categories, as described in the preamble sections and comment response documents on subpart C (stationary fuel combustions sources) and other individual subparts. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses.

Regarding the comment on expenditure on R&D or reductions rather than reporting, the purpose of this reporting rule is to collect the emissions data needed to develop GHG policies and programs. The data collection will provide EPA, policy makers, and industry stakeholders a better understanding of emission sources and opportunities for emissions reductions. Better knowledge gained from this rule will help focus and target R&D expenditures and mitigation efforts so they are more effective.

Commenter Name: Melissa Thrailkill
Commenter Affiliation: Center for Biological Diversity
Document Control Number: EPA-HQ-OAR-2008-0508-0430.1
Comment Excerpt Number: 1

Comment: The EPA has proposed, with minor exceptions, that only those facilities that exceed a threshold of 25,000 metric tons of CO_2 equivalent (Mt CO_2e) per year will be required to monitor and report their GHG emissions. The EPA's assertion, however, that a 25,000 metric ton threshold "suited the needs of the reporting program by providing comprehensive coverage of emissions with a reasonable number of reporters," is not well supported. The threshold chosen must promote the overall goal of the reporting program, which is to support EPA's efforts to reduce greenhouse pollution to protect the public health and welfare. While designing the reporting rule so that the data collected is "of sufficient quality to support a range of approaches, is certainly desirable, the EPA's starting point must be to ensure that the reporting rule provides the agency with the information it needs to reduce emissions through existing Clean Air Act authorities, including promoting new technologies and practices and providing the foundation upon which the country can develop and secure long-term emissions reductions. These goals will be better served through the use of a lower threshold. The importance of lowering atmospheric GHG emissions is undeniable, and any mandatory reporting rule aimed at informing future climate-based policymaking must recognize this reality. As such, lowering the reporting threshold will provide the EPA and other decision-makers with more information to support successful pollution reductions. The EPA proposal of a 25,000 ton threshold seems to be based primarily on the agency's assertion that this level will allow the agency to meet its policy goals while at the same time excusing small emitters from reporting requirements. While we support the EPA in efforts to design an efficient reporting process, it is far from clear that simply omitting any reporting at all from sources under 25,000 tons is in fact efficient, or the best way to meet the agency's policy goals. The agency appears to have made the 25,000 ton proposal while looking at only one aspect of the issue, but in fact there are many good reasons to require a lower threshold. For example, while it may be true that "small entities may appear to have a higher

reporting cost per ton emissions, they may not have a high cost per ton reduction." [footnote: Stolaroff, J.K., et al., Design issues in a mandatory greenhouse gas emissions registry for the United States. Energy Policy (2009), doi: 10. 1016/j.enpol.2009.04.028.]. Thus, many of these smaller entities "are likely to be the least efficient, and may have a disproportionate share of low-cost, near term mitigation options," but "unless they report[,] these opportunities may go unrecognized." Many greenhouse gas reductions are actually cost positive, meaning that the emitter will save money by reducing pollution. By failing to develop reporting requirements for sources under 25,000 tons, the EPA is making decisions blindfolded to these reduction opportunities. In an effort to save a bit of paperwork for emitters under 25,000 tons, the EPA is depriving not only the public, but these emitters themselves, of important and valuable information. The EPA also appears to have made the 25,000 ton proposal without weighing the costs of the unspecified paperwork the EPA hopes to avoid against the foregone pollution reduction opportunities. While we agree that the EPA should focus first on the largest pollution sources, there is no reason to pass up valuable information that will help inform smaller pollution reduction opportunities. The urgency of the climate crisis demands that the agency take this broader view. Without deep and rapid pollution reductions, both large and small emitters and those that don't emit at all will be facing catastrophic consequences. Moreover, these health and welfare effects will fall disproportionately on those with the fewest resources to adapt. Any decision by the agency to forgo opportunities – either for better information or direct pollution reductions – must be justified in light of the full costs of continued inaction. The proposed rule gives no indication that the agency has done so.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Doug MacTaggart
Commenter Affiliation: C-Lock Technology, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0502.1
Comment Excerpt Number: 4

Comment: While in principle the 25,000 mt CO_2e threshold will provide good overall coverage for US GHG emissions as a whole, we believe that it may be useful to re-evaluate that threshold on a sectoral basis. If one objective of reporting is, as stated, to improve the overall US inventory and the basis for future policy decisions, the proposed threshold will result in serious under-representation of sectors such as agriculture, which accounts for a significant proportion of national GHG emissions (at least 6%) but is comprised of a large number of relatively smaller emitters. See the comments under V.JJ for further elaboration of this issue.

Response: See the preamble for the response on selection of the threshold, including the reasons for consistent thresholds across source categories. Based on comments received, EPA reexamined the threshold, both in general and for each industry. For responses to comments on specific threshold analyses for individual source categories such as subpart JJ (manure management), see the preamble section and comment response documents for relevant source category subparts. For responses to comments on reporting by agricultural sources, see the preamble section and comment response document volume on source categories to report.

Commenter Name: Bryan L. Brendle
Commenter Affiliation: National Association of Manufacturers
Document Control Number: EPA-HQ-OAR-2008-0508-0572.1

Comment Excerpt Number: 4

Comment: The NAM urges EPA to analyze data for potential emissions falling within the 25,000 and 100,000 tons of CO_2 Equivalent (t CO_2e) range. Although the proposal includes data on sources ranging from 1000 to 25,000 t CO_2e, there is a gap of emission thresholds not evaluated from the 25,000 to 100,000 t CO_2e range. Many manufacturers believe that the EPA can accomplish its objective of creating a robust GHG inventory by raising the reporting threshold from its recommended 25,000 t CO_2e to 100,000 t CO_2e. By raising the threshold, EPA could drastically reduce the number of potential mandatory registrants from approximately 13,000 reporters to approximately 6500 reporters, while still capturing more than 82 percent of estimated aggregate GHG emissions. Not only will this policy reduce paperwork burdens and reporting requirements on covered entities, but it will also streamline the amount of data that regulators must analyze in order to implement the registry. Furthermore, EPA states in its proposal that its goal is to maximize the amount of emissions reported while excluding small emitters altogether. According to industry analysis, raising the threshold to 100,000 t CO_2e could also reduce reporting requirements on 30,000 entities that would have to perform emission analysis to verify whether or not they would exceed the proposed 25,000 t CO_2e threshold. Further analysis of the manufacturing sector illustrates that mandating reporting requirements at the 25,000 t CO_2e level would actually bring in facilities that are not classified under Title V of the Clean Air Act (CAA) as so-called "major sources." It would be burdensome for manufacturing facilities that aren't even required to report Hazardous Air Pollutants (HAPs), for example, to report their GHG emissions. Enforcing GHG emission reporting at the 25,000 t CO_2e threshold would yield enormous amounts of data, much of it duplicative of data that existing EPA-administered laws require sources to report. EPA would expend resources to analyze this data but make proportionately small progress towards environmental objectives of the inventory. The EPA could therefore fulfill broader environmental objectives by devoting budgetary and manpower resources towards implementing energy-efficiency and related measures that would have the co-benefit of reducing the carbon intensity of the U.S. economy. For example, manufacturers already participate in the Energy Star program, a public/private partnership in which the the EPA and the U.S. Department of Energy promote energy efficient products and practices that save money and improve environmental quality. It is highly unlikely that imposing heavy regulatory burdens on small and mid-size manufacturers, who might otherwise invest in energy efficiency, would achieve EPA's stated goals. And, as noted above, such manufacturers represent a small segment of the U.S. GHG emissions profile. Because of the emissions threshold data gap discussed above, the NAM urges EPA to seek more data and strongly consider raising the threshold for mandatory reporting. At a minimum, the EPA should present evidence explaining why it has not gathered significant data on thresholds ranging from 25,000 to 100,000 t CO_2e on which the public may comment.

Response: See the preamble for the response on selection of the threshold. EPA estimates that the final rule will require approximately 10,150 direct emitting facilities to submit annual reports. While we agree that approximately 30,000 facilities could have to assess applicability to determine whether they must report, for the vast majority of facilities this assessment will be a very simple calculation based on available data. Most of these facilities have only stationary fuel combustion sources and can determine applicability based on mmBtu/hr heat input capacity screening cutoffs for common fuels or by performing the simple Tier 1 calculation procedure which relies on available records of fuel use multiplied by an emission factor and does not require any measurements or monitoring instrumentation. EPA has also developed guidance with simple, conservative screening cutoffs for other source categories with numerical thresholds (e.g., head of livestock for manure management facilities) so that small facilities will not need to

perform emissions calculations. For further discussion of applicability determination methods, see the preamble response on applicability determination.

See the preambles to the proposed and final rule for discussion of EPA's finding that no other current programs provide the comprehensive GHG data being collected by this rule and for discussion of the purpose of this reporting rule and its relationship to other programs. Regarding reporting by facilities not considered major under other CAA programs, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses.

Commenter Name: Angus E. Crane
Commenter Affiliation: North American Insulation Manufacturers Association (NAIMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0537.1
Comment Excerpt Number: 3

Comment: EPA should either (1) exempt from the proposed rule all fiber glass and rock and slag wool insulation facilities within the glass production source category (as discussed in the following section); (2) raise the threshold for reporting to reduce the number of companies subject to the proposed rule (also discussed in the following section); or (3) consider creating graduated trigger or threshold levels for complying with reporting requirements under the proposed rule. The greater the proposed rule's requirements and the longer they are imposed, the greater the compliance costs and additional burdens on companies during financially uncertain times. If EPA does not exempt from the proposed rule all fiber glass and rock and slag wool insulation facilities, or raise the threshold for reporting, EPA could streamline the proposed rule and reduce the burden on the glass production source category by establishing higher trigger or threshold levels for reporting to reduce the number of companies impacted, and limiting the duration of the entire program. Specifically, the proposed rule could clarify that those sources with emissions above 25,000 metric tons of CO_2e, but less than a higher threshold, say 50,000 metric tons CO_2e, are subject to fewer requirements than those above the 50,000 metric ton threshold. EPA, for example, could require facilities in the 25,000 to 50,000 metric ton threshold to report emissions just one time.

Response: See the preamble for the responses on selection of the threshold and selection of source categories to report. In addition, for responses on (1) the definition of the glass production source category and the request to exempt certain processes and (2) the request to raise the threshold for glass, see the preamble section and comment response document for Subpart N, Glass Production. Regarding the suggestion that smaller sources should report only one time, see the comment response volume on the duration of reporting.

Commenter Name: See Table 9
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0604.1
Comment Excerpt Number: 1

Comment: This rule will impose substantial burden on reporting facilities, in terms of investments, ongoing costs and personnel time commitments. Therefore it is imperative that EPA take reasonable measures to minimize both the scope of the reporting and the breadth of the applicability while obtaining sufficient data and information to achieve the purposes of the rule.

One aspect of the applicability relates to the reporting threshold. We note that the statutory provisions associated with EPA's requirement to propose and issue greenhouse gas reporting rules did not set forth any reporting thresholds, and simply required EPA to "...develop and publish a draft rule...to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the United States." In an attempt to achieve the reporting goals of the Agency in an orderly manner we recommend that EPA consider phasing in the ultimate reporting threshold of 25,000 metric tons. For example, EPA could set a threshold of 100,000 metric tons for calendar year 2010 emissions, and phase in the lower threshold on a timetable that would match the timing of regulatory implementation under the climate change legislation that will emerge from Congress. A similar approach was employed for the Toxic Release Inventory (TRI) reporting rule: "The threshold amounts for purposes of reporting under §372.30 for toxic chemicals are as follows: (a)With respect to a toxic chemical manufactured (included imported) or processed at a facility during the following calendar years: (1) 987 – 75,000 pounds of the chemical manufactured or processed for the year. (2) 1988 - 50,000 pounds of the chemical manufactured or processed for the year. (3) 1989 – 25,000 pounds of the chemical manufactured or processed for the year."

Response: See the preamble for the response on selection of the threshold. For the response on phasing in reporting, see the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 4.

Commenter Name: Scott Manley
Commenter Affiliation: Wisconsin Manufacturers & Commerce (WMC)
Document Control Number: EPA-HQ-OAR-2008-0508-0728.1
Comment Excerpt Number: 1

Comment: The proposed rule would require facilities with direct emissions of at least 25,000 metric tons of carbon dioxide equivalent (t CO_2e) to report on an annual basis. WMC believes this threshold is too low, and will require small emitters who do not make a significant contribution to GHG emissions to report under the rule. In addition to applying expensive and unnecessary regulations on insignificant sources, the 25,000 t CO_2e threshold is contrary to EPA's stated goal of maximizing the amount of emissions reported while excluding small emitters altogether. Therefore, WMC recommends the reporting threshold be increased to 100,000 t CO_2e. This threshold is much more consistent with reporting levels already required in Wisconsin through the Department of Natural Resources (DNR) Air Emission Inventory. By raising the threshold, EPA could substantially reduce the number of potential mandatory registrants from approximately 13,000 reporters to approximately 6,500 reporters, while still capturing more than 82 percent of estimated aggregate GHG emissions. This will save time and financial resources in the private sector, as well as valuable staff time at EPA by reducing paperwork burdens and streamlining the amount of data that regulators must analyze in order to implement the registry. According to industry analysis, increasing the reporting threshold to 100,000 t CO_2e could also allow for the avoidance of significant expense for 30,000 entities that would otherwise need to perform emission analysis to verify whether or not they would exceed the proposed 25,000 t CO_2e threshold. A reporting threshold of 100,000 t CO_2e strikes the correct balance between streamlined compliance of regulated entities and a robust set of emissions data, and should therefore be approved in the final version of the rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0572.1, excerpt 4.

Commenter Name: See Table 13
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0395.1
Comment Excerpt Number: 3

Comment: TCFA contends that EPA's determination that the mandatory reporting threshold should be set at 25,000 MT CO_2e per year was based on an inadequate analysis of the sector-by-sector emissions estimates. This faulty analysis masks the significant number of facilities in the beef industry that would be required to report under the rule. A more accurate analysis and data are provided in other comment sections below. If faulty analysis similarly applies to sectors outside of the beef industry, the 25,000 tons/year threshold would bring in many more smaller sources that, based on expressed concerns in the Preamble about limiting the number of entities required to report, EPA apparently does not intend to bring in. It seems unreasonable and counterproductive to require a significant number of smaller facilities to report their emissions. The cost and effort of doing so from both the facility's and EPA's perspectives generates very little meaningful data, relative to the GHG contribution from beef cattle facilities. A reasonable starting point might be for EPA to require reporting from entities that are currently regulated under the Title V program since these sources may be the largest greenhouse gas emitters in the economy. In addition, reporting from Title V facilities would bring in a more sophisticated and a smaller population of reporters. They are already accustomed to frequently reporting complicated information and often have internal environmental staff to ensure compliance with the regulation. Most cattle facilities do not have such internal staff. Consequently, they would have to hire outside consultants at significant cost. At a time when much of the US economy is finding it hard to stay in business, this kind of added expense may very well send many over the edge. In sum, TCFA urges EPA to correct errors in the threshold estimates and evaluate additional reporting thresholds that would more appropriately represent the "large facilities" (i.e., 50,000 MT/year and 75,000 MT/year).

Response: See the preamble for the response on selection of the threshold and for the economic impacts analysis. Based on comments received, EPA reexamined the threshold and the cost and economic impacts, both in general and for each industry. EPA maintained the 25,000 metric tons CO_2e per year threshold for reasons discussed in the preamble. For responses to comments on the specific threshold, cost, and technical analyses for beef facilities in the manure management source category, see the preamble section and comment response document on Subpart JJ, Manure Management. Regarding the comment that only Title V sources should be required to report emissions, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6.

Commenter Name: See Table 4
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0509.1
Comment Excerpt Number: 3

Comment: One way to reduce the regulatory burden presented by the Proposed Rule would be to reduce the number of facilities required to report, i.e. raise the reporting thresholds. For example, proposed 40 C.F.R. § 98.2(a)(1)(v) makes GHG emissions reporting requirements applicable to all regulated categories of sources at cement plants, regardless of the magnitude of GHG emissions from the cement plant or from the particular type of source at the cement plant. This absolute approach has the potential to require reporting from more facilities than is necessary to have a useful picture of GHG emissions from the sector. It also could require a

cement plant to devote substantial effort to GHG reporting for a source located at the cement plant that has quite small GHG emissions. Importantly, by requiring GHG reporting for all cement plants, regardless of the magnitude of the plant's emissions, EPA removes an incentive for those plants to reduce GHG emissions to get below a threshold in order to avoid the burden of monitoring and reporting.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2, regarding all-in source categories including cement. Also see the preamble and comment response document on individual source categories, such as cement, for discussion of changes EPA has made to the rules to reduce the burden and for responses to comments on threshold analyses for specific source categories.

Regarding reporting of emissions from small sources within facilities, see the preamble for the response on de minimis reporting. In addition, see the preamble for the response on provisions for facilities to cease reporting if emissions are reduced below a specified level.

Commenter Name: Justin Oldfield
Commenter Affiliation: California Cattlemen's Association (CCA)
Document Control Number: EPA-HQ-OAR-2008-0508-0383
Comment Excerpt Number: 3

Comment: Prominent state GHG programs have excluded agriculture as a regulated entity for good reason. For example, the California Global Warming Solutions Act of 2006 (AB 32) mandated GHG reductions from high emitting industry sectors, such as transportation, power generation and manufacturing. Unlike the EPA proposed rule, AB 32 and the associated Scoping Plan does not set an arbitrary figure of 25,000 MT CO_2e except for combustion systems. By adopting a plan that focuses on high emitting industries, California will be able to more effectively reduce GHGs while minimizing regulatory burdens on industries, like agriculture, that comprise a small percentage of the state's GHG emission inventory. The EPA proposed rule should adopt this same approach and eliminate the 25,000 MT CO_2e figure and focus on specific industries that account for the greatest percentage of U.S. GHG emissions.

Response: See the preamble for the response on selection of the threshold. Also see the preamble for responses on the selection of source categories and on subpart JJ, manure management. It should be noted that manure management is the only agricultural-specific source category required to report under the rule.

Commenter Name: David A. Buff
Commenter Affiliation: Florida Sugar Industry (FSI)
Document Control Number: EPA-HQ-OAR-2008-0508-0500.1
Comment Excerpt Number: 1

Comment: The FSI respectfully suggests that EPA should use a higher threshold. EPA's data analysis in Table 5-3 shows that a reporting threshold of 25,000 TPY would capture 13,000 facilities and 55% of total CO_2e emissions. If the reporting threshold is increased to 100,000 TPY, however, the number of facilities requiring reporting drops to 6,600 facilities, while the percentage of total emissions captured only drops to 52%. The use of a 100,000 TPY threshold results in an inconsequential change in the total emissions reported, but it dramatically lowers the

number of facilities required to report, and therefore dramatically lowers the total cost that must be paid by the American public. For these reasons, EPA should set a 100,000 TPY threshold in lieu of the 25,000 TPY threshold that is contained in the proposed rule. In the alternative, EPA should consider the use of a 50,000 TPY threshold. We recommend that EPA re-evaluate the reporting emission threshold selected for both listed and non-listed facilities with the goal of minimizing the industry's reporting burden and reducing the EPA's costs for reviewing the data.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Robert Rouse
Commenter Affiliation: The Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2008-0508-0533.1
Comment Excerpt Number: 1

Comment: In the preamble of the proposed rule, EPA expressed an interest in receiving data and analysis on the proposed reporting thresholds. Dow currently calculates its emissions on an annual basis as a part of its Sustainability Goals. Based on the calculation methods currently used, Dow had fifteen sites emitting greater than 25,000 MT CO_2e in 2008, representing 99.1% of the calculated emissions from all of Dow's US sites. If a threshold of 100,000 MT CO_2e per year is used, the number of sites would be reduced to eight, but this would still represent 96.5% of Dow's emissions from its US sites. EPA has indicated that GHG emission data reported will be used to inform future climate change policy decisions. The inclusion or exclusion of this small amount of data may not have any impact on policy decisions. As a result, Dow recommends that the reporting threshold be reevaluated to consider a threshold of 100,000 MT CO_2e / year, or potentially some other value between 25,000 and 100,000 MT CO_2e per year. In the American Chemical Council's (ACC) comments, they discussed an option of a phased-in approach, starting with a higher threshold of 100,000 MT CO_2e in 2010 and gradually reducing this threshold to 25,000 MT CO_2e. This would allow both EPA and industry to develop and implement the needed processes on a smaller set of data, while still supplying the vast majority of emissions.

Response: See the preamble for the response on selection of the threshold. Regarding the suggestion on phasing, see the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 1.

Commenter Name: Mary Uhl
Commenter Affiliation: New Mexico Environment Department
Document Control Number: EPA-HQ-OAR-2008-0508-0450.1
Comment Excerpt Number: 5

Comment: New Mexico recommends a reporting threshold of 10,000 metric tons CO_2e emissions per year. Given that 25,000 metric tons CO_2e is a likely threshold for future emissions reduction mandates and/or GHG emissions trading programs, New Mexico believes it is important to have emissions data for sources below this threshold to monitor leakage of emissions to smaller sources, to indicate necessary adjustments to the program, such as altering facility definitions, and for monitoring competitiveness concerns in industries with sources both above and below the threshold. EPA expresses concern that a 10,000 metric ton threshold would impact small businesses, hospitals, commercial establishments, and schools. New Mexico does not believe that burdens on these sources need be excessive, as EPA could provide simplified

reporting procedures for such sources and specifically exempt categories for which even simplified reporting is thought too burdensome.

Response: See the preamble for the response on selection of the threshold. Also, as stated in the preamble, the EPA GHG reporting rule does not preempt or replace State rules, and States can collect additional data.

Commenter Name: Thomas W. Easterly
Commenter Affiliation: Indiana Department of Environmental Management (IDEM)
Document Control Number: EPA-HQ-OAR-2008-0508-0525.1
Comment Excerpt Number: 9

Comment: The proposed rule does not contain accounting provisions for emission offsets. U.S. EPA should allow facilities to use emission offsets when calculating actual emissions in order to determine applicability to the proposed rule. U.S. EPA should include provisions in the proposed rule for how facilities can account for projects that offset GHG emissions and how these projects can be accounted for when determining their emissions.

Response: See the discussion of source categories to report in the preamble for the response to this comment on offsets.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 1

Comment: We continue to believe that 100,000 metric tons CO_2e is a more appropriate threshold for reporting than is the proposed 25,000 metric tons. We believe it is critical that EPA balance the need for GHG data with minimizing the burden on smaller facilities, and a threshold of 100,000 metric tons achieves that balance. However, at a minimum, EPA should review and analyze at least one additional threshold level between 25,000 and 100,000 metric tons. The FY 2008 Consolidate Appropriations Act simply required EPA to ".. .develop and publish a draft rule.. .to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the United States," and was silent on any reporting thresholds. We have reviewed the information contained in the preamble, and noted the following from page 16467 of the proposal: "Furthermore, many industry stakeholders that EPA met with expressed support for a 25,000 metric ton of CO_2e threshold because it sufficiently captures the majority of GHG emissions in the U.S., while excluding smaller facilities and sources." On the contrary, our member facilities reviewed their GHG emissions data, and concluded that the proposed reporting threshold would not exclude a number of smaller facilities and sources. In fact, at a threshold of 25,000 MT CO_2e, many small sources would be obligated to report. While we cannot speak to the meetings or outreach activities EPA held with other stakeholders on reporting thresholds, ACC met with and provided information to EPA several times in the past to discuss reporting thresholds. Specifically, in a letter to EPA dated June 20, 2008, ACC stated the following: "Any mandatory reporting requirements should require reporting actual or estimated emissions of all six categories of GHGs (CO_2, CH_4, N_2O, SF_6, PFCs, and HFCs) in units of CO_2-e. The rule should require reporting from facilities emitting 100,000 metric tons or more of CO_2-e per year of direct emissions, with no reporting requirements for facilities with less than 100,000 metric

tons of CO_2e per year." Setting the threshold at 100,000 MT per year of CO_2 e would gather greater than 90 percent of the emissions data from the chemical industry sector, and would exclude small facilities from the need to report and maintain information. Reporting at the 100,000 MT CO_2e annual threshold would also be consistent with the requirements of the European Union Emissions Trading Scheme for general industrial sources, and Canada's mandatory reporting rules. EPA should also be aware that the 25,000 MT per year CO_2e threshold will not only require reporting by a number of small industrial sites, but will also require reporting by commercial entities, universities and other small emitters, and their emissions will only represent a small fraction of U.S. emissions, arguably not worth the burden that will be imposed on them. Thus we recommend that a reporting threshold of 100,000 MT per year of CO_2e emissions be incorporated into the final reporting rule and that the language at §98.2 (and other pertinent sections) be modified accordingly. As an alternative, EPA could finalize a rule that phases in reporting thresholds. For example, EPA could require the initial reporting of emissions from facilities that emit greater than 100,000 MT per year of CO_2e, and phase in greater than 50,000 MT CO_2e and 25,000 MT CO_2e per year thresholds at later dates. Doing so would result in the initial reporting of nearly all of the emissions from the chemical industry, allow EPA the opportunity to review this vast data set and then make subsequent determinations on lower reporting thresholds at later dates. Note that this practice is not without precedent. The final Toxic Chemical Release Reporting rules ([3]Toxic Release Inventory or TRI´) set forth three tiers and time periods for reporting. Specifically, the final rules stated the following at 40 CFR 372.25:

"The threshold amounts for purposes of reporting under §372.30 for toxic chemicals are as follows:

(a) With respect to a toxic chemical manufactured (included imported) or processed at a facility during the following calendar years :

1987 – 75,000 pounds of the chemical manufactured or processed for the year.
1988 - 50,000 pounds of the chemical manufactured or processed for the year.
1989 – 25,000 pounds of the chemical manufactured or processed for the year."

In the preamble to the final TRI reporting rule (53 FR 4508, February 16, 1988), EPA stated the following: [3]EPA agrees with comments to the effect that the first few years 'data should be evaluated to determine whether modifications of the threshold would meet the statutory test of obtaining reporting on a substantial majority of the releases (i.e., pounds released per year) of each chemical from subject facilities.' A phased approach with regard to GHG reporting would also enable EPA to obtain a substantial amount of data while satisfying the Congressional requirement to obtain information from all sectors of the economy. If acceptable to EPA, we recommend that as an alternative to the 100,000 metric ton reporting threshold, the proposed language at §98.2 (and other pertinent sections) be modified to accommodate a phased schedule for reporting.

Response: See the preamble for the response on selection of the threshold. Regarding the suggestion on phasing, see the response to comment EPA--HQ-OAR-2008-0508-0494.1, excerpt 4.

The selected threshold will result in reporting by those commercial and institutional entities that have large stationary combustion sources that trigger the 25,000 metric ton threshold. However, it will exclude the vast majority of commercial and institutional facilities. Reporting by

miscellaneous stationary combustion sources across all sectors if they are above the threshold is needed to provide a consistent dataset for analyzing potential policies and programs, and the impacts of such reporting was analyzed in the regulatory impacts analysis (RIA) for the final rule.

Commenter Name: Stuart A. Clark
Commenter Affiliation: Washington State Department of Ecology (Ecology)
Document Control Number: EPA-HQ-OAR-2008-0508-0646.1
Comment Excerpt Number: 1

Comment: The reporting threshold should be 10,000 MT CO_2e: Ecology appreciates the rationale behind EPA's selection of a 25,000 MT CO_2e reporting threshold or a capacity based threshold for certain source categories. Under EPA's analysis, this threshold will result in capturing 85-90% of U.S. GHG emissions. EPA notes that many industry stakeholders support a 25,000 MT CO_2e reporting threshold, and expresses a concern that a 10,000 MT CO_2e threshold would impact small businesses. There is a difference between reporting emissions for the purpose of participating in a cap and trade program, and reporting for the purpose of developing a comprehensive accounting of GHG emissions data. Ecology believes the 25,000 MT CO_2e and capacity thresholds chosen by EPA are appropriate as thresholds for participation in a cap and trade regime because it would cover the bulk of the emissions of concern and not impose regulatory requirements on small businesses. However, with the goal of providing comprehensive coverage of emissions to provide a basis for future regulatory actions, a threshold of 10,000 MT CO_2e provides broader coverage of emissions. This is the reporting threshold selected by WCI, and is also the threshold in Washington. A lower threshold allows a better understanding of the actual contributions from smaller sources, an ability to monitor for leakage of emissions from larger to smaller sources, and an ability to monitor for any adverse competitive effects as a result of the rule. Such a threshold triggers a reporting requirement, but does not trigger further regulatory action that would be burdensome to small businesses. We also note that the current version of the Waxman-Markey bill includes a 10,000 MT CO_2e threshold. EPA raises the concern that a 10,000 MT CO_2e threshold would only increase GHG emissions coverage marginally while imposing burdens on small businesses. We believe that reporting GHG emissions from these sources is not necessarily burdensome; the majority of these sources would trigger a reporting threshold from the use of combustion equipment, which requires no more than accounting of fuel use to calculate GHG emissions. To the extent there is still believed to be a burden on these sources, EPA could elect to develop simplified methods to estimate emissions. These reporters could also be allowed to self-certify their emissions to further reduce regulatory burden. EPA could also address any regulatory burden by exempting selected small source categories from reporting requirements.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Alexander D. Menotti
Commenter Affiliation: Kelley Drye & Warren et. al LLP on behalf of the Steel Manufacturers Association (SMA) and Specialty Steel Industry of North America (SSINA)
Document Control Number: EPA-HQ-OAR-2008-0508-0656.1
Comment Excerpt Number: 1

Comment: SMA/SSINA support increasing the reporting threshold from 25,000 to 100,000 metric tons of CO_2e annually. Such a threshold still would account for the vast majority of iron and steel sector emissions (99.8% at 25,000 MT vs. 99.2% at 100,000), yet would greatly decrease regulatory burdens at small facilities that are least equipped to handle increased recordkeeping and reporting obligations. As steel emissions account for only roughly 1% of national GHG emissions, the increased burden of capturing an additional 0.6% of this 1% are difficult to justify given the considerable costs to smaller facilities and the proposal's omission of relatively significant emitters from any reporting at all.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses. Also, see the preamble discussion and comment response document on Subpart Q, Iron and Steel production, for comment responses specific to this industry.

Commenter Name: Alison A. Keane
Commenter Affiliation: National Paint & Coatings Association, Inc. (NPCA/FSCT)
Document Control Number: EPA-HQ-OAR-2008-0508-0593.1
Comment Excerpt Number: 1

Comment: It is apparent from EPA's information on emission coverage of downstream sources, that emissions from most industrial facilities are relatively small compared to very large sources of emissions (e.g. power plants) and mobile sources (e.g. automobiles and trucks). The threshold spectrum that EPA examined, from 1,000 CO_2 -equivalent emissions ("t CO_2e") to 100,000 t CO_2e, represents approximately 35,000 facilities. However it only accounts for approximately 3.6% of the national emissions of GHGs. Ultimately, the threshold does not impact a significant percent of national emissions covered by the rule (3.6%), however, a low reporting threshold does have a large impact on the number of facilities that will be covered and subsequently burdened by this rule. In fact, a significant number of facilities (approximately 30 ,000) would need to assess whether or not to report.

Response: See the preamble for the response on selection of the threshold. EPA is not sure of the source for the 35,000 facilities and 3.6% of emissions cited by the commenter. See table 5-4 in the Regulatory Impacts Analysis for the final rule and section VII of the preamble for EPA's analysis of the facility and emissions coverage at the thresholds considered. Also as explained in the preamble and the comment response document on applicability, EPA is developing outreach materials and tools to help facilities determine applicability.

Commenter Name: Meg Voorhes
Commenter Affiliation: Social Investment Forum
Document Control Number: EPA-HQ-OAR-2008-0508-0657.1
Comment Excerpt Number: 3

Comment: We are concerned that even without post-rule writing manipulation, there may be companies with significant emissions that will have facilities below the current proposed threshold. We believe that there should be some overall company threshold above which substantially all emissions by the company must be reported. Alternative suggestions to address this concern: 1. Two tier thresholds. If a company has overall emissions above X (probably higher than 25,000 metric tons of CO_2e) then any facility owned by that company would have to

report if it had emissions higher than Y (a number lower than the current facility threshold). 2. Any publicly traded company must report emissions (and purchased electricity) for all facilities. If facilities fall below the facility threshold in the Proposed Rule, the company may report all otherwise non-reporting facilities in a single company record. 3. A single-tier company threshold for reporting company totals in addition to the current requirements in the Proposed Rule. Any company with total emissions above X must report as a company. For large companies with facilities already reporting, this would be an additional requirement. For the purposes of this rule, "company" would be defined as any legally incorporated entity. Companies would only be responsible for reporting their direct emissions and their direct purchase of electricity. They would not report emissions or electricity purchases from any subsidiaries. As investors, we are concerned with comprehensive and consistent information across the companies we evaluate. While any database of this nature will likely have distortions, the more comprehensive the data, the more possible it is for investment analysts to control for those distortions. The current Proposed Rule, while a good start, has the very real potential to capture only a portion of publicly traded company emissions. One can easily imagine a scenario where publicly traded companies with identical levels of GHG emissions corporate-wide could nonetheless report widely varying percentages of those emissions based on the size of their facilities. The more the EPA's final rule covers within a given company's emissions, the less distortion present and the more comparability possible within investment analysis.

Response: See the preamble and related comment response document values for the responses on selection of the threshold and on the selection of the level of reporting (facility level rather than corporate level for most source categories, with the exception of importers and exporters). Also see the preamble for the response on reporting of electricity purchases.

Commenter Name: Alison A. Keane
Commenter Affiliation: National Paint & Coatings Association, Inc. (NPCA/FSCT)
Document Control Number: EPA-HQ-OAR-2008-0508-0593.1
Comment Excerpt Number: 3

Comment: Based on EPA's Proposed Mandatory GHG Reporting Rule Overview Presentation [Footnote: Refer to Slide 12 in Proposed Mandatory GHG Reporting Rule Overview Presentation], the Proposed Rule covers approximately 54.9% of the emissions for downstream sources via the proposed 25,000 t CO_2e threshold (approximately 13,205 facilities). However, EPA covers approximately 52.4% of the emissions for sources via a 100,000 tCO2 e threshold (approximately 6,598 facilities) – only a 3% decrease in the collection of emissions data and a fifty percent reduction in the number of facilities required to report. It is premature to set a 25,000 t CO_2e threshold because EPA did not analyze thresholds between 25,000 and 100,000 t CO_2e. Based on EPA's analysis, the 25,000 t CO_2e threshold is the minimum that should be set – given the fact that facilities below 25,000 t CO_2e are not significant sources. Thus, EPA should set the threshold at 100,000 t CO_2e, relieving a considerable amount of facilities from the burden of this rulemaking, while preserving emissions data to within 3% of the Proposed Rule's 25,000 t CO_2e threshold. In the alternative, at a minimum, EPA must analyze at least one additional threshold level between 25,000 and 100,000 t CO_2e. A preliminary investigation of a middle threshold level of 50,000 t CO_2e, indicated that the Proposed Rule would cover 53.7% of the emissions for downstream sources (approximately 9,900 facilities). A 50,000 t CO_2e threshold would reduce the downstream source emission coverage by less than 1%, but would reduce the reporting burden for approximately 2,200 facilities, and by at least $20 million.

Response: See the preamble for the response on selection of the threshold. The commenter did not provide the preliminary analysis of a 50,000 threshold, so EPA is not able to comment on the specific numbers listed in the comment for such a threshold. However the preamble and supporting memo in the docket describes why EPA does not need to perform a quantitative analyses of an intermediate threshold.

Commenter Name: Thomas W. Easterly
Commenter Affiliation: Indiana Department of Environmental Management (IDEM)
Document Control Number: EPA-HQ-OAR-2008-0508-0525.1
Comment Excerpt Number: 22

Comment: If U.S. EPA proceeds with this proposed reporting rule, only the largest fossil fuel based GHG emitters should initially be required to report their emissions (i.e. an emissions based threshold greater than those considered in the proposed rule). Depending on the benefits associated with the initially reporting results, additional sources and sectors could be required to report at a later date. This would allow U.S. EPA to obtain data that is of sufficient quality to support future climate change policies and regulations without placing an undue administrative burden on a large number of smaller emitting facilities.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 4. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.1
Comment Excerpt Number: 11

Comment: A higher reporting threshold should be selected as the basis for any reporting threshold under the Mandatory GHG Reporting rule. NPRA believes that a higher reporting threshold will be more effective at gathering data on significant sources while providing a balance to the regulatory burdens added to the regulated community.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Gary F. Lindgren
Commenter Affiliation: Calumet Specialty Products Partner, L.P.
Document Control Number: EPA-HQ-OAR-2008-0508-0626.1
Comment Excerpt Number: 3

Comment: EPA needs to raise the facility reporting threshold to 50,000 tons of CO_2 equivalent per year. This would relieve the very significant reporting burden on small businesses and small facilities. EPA has significantly underestimated the costs of data collection, data validation, and reporting.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small

businesses. Also see the preamble section and comment response document on economic impacts for responses to comments on cost and economic impacts.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0477.1
Comment Excerpt Number: 10

Comment: At the outset, the Associations want to be clear that they support EPA's decision to establish a threshold no less than 25,000 metric tons of CO_2-equivalent (Mt CO_2e). At the same time, they believe that EPA's analysis of other threshold options lacks the proper statistical rigor required for such a far-reaching rule. Similarly, while the proposed rule would allow a facility with an aggregate maximum rated heat input capacity of less than 30 million British thermal units (mmBtu) per hour to presume it has emissions below the 25,000 Mt CO_2e threshold, the 30 mmBtu figure is not supported by a statistically sound analysis. When proposing a policy that would induce significant costs on industry, proper statistical analysis is necessary to establish the coverage of varying threshold levels through empirical analysis and to estimate the marginal costs and benefits of moving to more demanding thresholds. EPA's analysis only examines four threshold levels, which is insufficient to generate a robust statistical analysis examining the number of facilities and the percentage of emissions covered. A. EPA failed to give sufficient consideration to thresholds above 25,000 Mt CO_2e. In terms of the statistical impacts, EPA attempts to justify the selected threshold by comparing the number of facilities covered under its proposed 25,000 Mt CO_2e threshold to 1,000, 10,000, and 100,000 Mt CO_2e thresholds, yet EPA does not explain adequately why these comparison thresholds were chosen. From our examination, it appears that they may have been selected for aesthetic roundness and potential consistency with some other existing state and regional programs instead of any statistical reasoning. The Associations believe that EPA must consider thresholds between 25,000 and 100,000 Mt CO_2e, as well as thresholds above 100,000 Mt CO_2e. The statistical symmetry of EPA's current threshold comparison is inconsistent in two ways. First, EPA compares its proposed 25,000 Mt CO_2e threshold to two lower thresholds but only one higher threshold. Second, the 100,000 Mt CO_2e threshold is four times greater than the 25,000 Mt CO_2e threshold and is 10 times greater than the next lowest threshold (10,000 Mt CO_2e) examined. EPA does not provide satisfactory statistical reasoning for the jumps in the thresholds it examined. EPA acknowledges that the accuracy of its estimates of the number of facilities covered under different emission thresholds varies widely by source category, particularly in those sectors where limited data availability precludes a rigorous analysis. For example, in its analysis of the effect of various thresholds on Unspecified Stationary Combustion Sources, EPA states "Due to the methodology employed, EPA considers the results . . . to be a coarse estimate of the relative effect of threshold options" (Threshold TSD at p.25). The uncertainty in this analysis is important because although these sources accounted for just six percent of U.S. GHG emissions in 2006, the number of covered entities is among the most sensitive to threshold choice. Given EPA's lack of statistical rigor, the Associations believe it would be prudent for EPA to consider a greater number of thresholds in its analysis along with a cost-benefit analysis for each additional threshold. We recommend that EPA evaluate multiple thresholds between 25,000 Mt CO_2e and 100,000 Mt CO_2e and perhaps one above 100,000 Mt CO_2e as well. Our recommendation is supported by EPA's own data. Moving from a 25,000 Mt CO_2e threshold to 100,000 Mt CO_2e threshold for Unspecified Industrial Stationary Combustion reduces the number of covered facilities by 66 percent (2,000 entities), while covered emissions fall by just 23 percent [See DCN:EPA-HQ-OAR-2008-0508-0477.1 for table illustrating covered emissions

and facilities associated with varying thresholds]. Evaluating additional thresholds is reaffirmed by EPA's own statement that "as you move from lower to higher emissions thresholds the number of reporters falls far faster than the emissions coverage." (Threshold TSD at p. 26.) Including additional thresholds would offer a better view of the range of potential outcomes from choice of threshold and clarify the point that EPA does not know precisely how many entities would be covered under each option. B. The Proposed Rule lacks clearly stated summary level data on emissions coverage by threshold. In addition to the facility coverage, EPA provides estimates in Section IV.C of the preamble of the percent of total emissions covered under the 1,000, 10,000, and 25,000 Mt CO_2e thresholds. For the 100,000 Mt CO_2e threshold, EPA does not provide an estimate of the percent of total emissions covered. While one may be able to calculate the coverage using sector-specific data supplied in the Threshold TSD, EPA should provide emissions coverage estimates for the 100,000 Mt CO_2e threshold as it does for the other thresholds. C. EPA's fragmentation argument is inconsistent. EPA contends that the 100,000 Mt CO_2e threshold "fragments" several large industry sectors and that the 25,000 Mt CO_2e threshold avoids this fragmentation. EPA lists ammonia manufacturing, nitric acid production, lime manufacturing, and pulp and paper as examples of these key industries. However, for nitric acid and lime manufacturing, 100% facility coverage is not achievable even at the 25,000 Mt CO_2e threshold, which contradicts EPA's contention [See DCN:EPA-HQ-OAR-2008-0508-0477.1 for table illustrating industry fragmentation]. Also, EPA's own data show that other industries with significant GHG emissions are fragmented even at thresholds at or below its recommend 25,000 Mt CO_2e threshold. This rebuts EPA's argument that the 25,000 Mt CO_2e threshold is preferred due to avoiding "fragmentation" of industries emitting significant amounts of GHGs. For EPA to improve upon its threshold analysis, we recommend the following: 1. Consider additional threshold levels between 25,000 and 100,000 Mt CO_2e, and possibly higher than 100,000 Mt CO_2e as part of a more thorough statistical analysis. 2. Select thresholds based on statistical reasoning as opposed to simply aesthetic roundness and/or consistency with other existing state and regional programs, especially as EPA's reporting rule may preempt state and regional reporting requirements. 3. Discuss the incremental change in burden and coverage when moving from one level to the next. 4. Explain why engineering best estimates cannot be used if a threshold "fragments" a particular industry. 5. Explain why EPA shows total emissions by industry and by facility/facilities in its proposed rule, yet wants to burden entities to collect the same data. [Footnote: For blocks of facilities within an industry, one can use the data in the Threshold Analysis tables by industry to back-calculate facility-level emissions by taking the difference in emissions coverage between thresholds and dividing it by the difference in facilities covered between thresholds]

Response: See the preamble for the response on selection of the threshold, including the response to the comment on analysis of intermediate thresholds between 25,000 and 100,000 metric tons per year and discussion of the factors considered in selecting the threshold.

Regarding the 30 mmBTU/hr heat input criteria in the rule, see the response to EPA-HQ-OAR-2008-0508-0644.1.

Regarding fragmentation, see the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 15.

Regarding the contention that EPA does not show the percent of national emissions covered by the 100,000 metric tons CO2e threshold, the percent is shown in the preamble section on economic impacts and in the Regulatory Impacts Analysis (RIA). The incremental change between options is also presented.

Regarding the need to collect facility-level data and the use of best engineering estimates, see the preamble for responses and discussion of the objectives of the reporting rule, its relationship to other programs, the general monitoring requirements, and the level of reporting.

Commenter Name: James S. Loving
Commenter Affiliation: National Cooperative Refinery Association (NCRA)
Document Control Number: EPA-HQ-OAR-2008-0508-0609.1
Comment Excerpt Number: 7

Comment: EPA should increase the facility reporting threshold to 50,000 pounds of CO_2.

Response: See the preamble for the response on selection of the threshold. Note also, that we assume the commenter meant "tons" not "pounds".

Commenter Name: [name not given]
Commenter Affiliation: Texas Association of Business
Document Control Number: EPA-HQ-OAR-2008-0508-0698
Comment Excerpt Number: 5

Comment: The rule proposes a reporting threshold of 25,000 metric tons of CO_2 equivalent for certain facilities on an annual facility-wide basis. Certainly, this threshold should not be reduced, due to the significant additional regulatory burden that would be created with little additional benefit in terms of emissions covered. In fact, EPA should consider increasing the threshold, perhaps to 100,000 tons. Granted, the proposed 25,000 ton limit may be consistent with other programs, however, the value of that consistency must be measured against the cost of essentially doubling the size of the reporting universe for only a very small gain in emissions that would be subject to reporting. Any decision to require a threshold of less than 100,000 tons of CO_2 equivalent should be accompanied by a clear analysis that shows why indirect measurement or other means of assessment of the relatively small increment in total emissions would not serve the purpose of the proposed rule.

Response: See the preamble for the response on selection of the threshold. The EPA does not currently have sufficiently accurate facility-level data for facilities that emit less than 100,000 metric tons of CO2e to rigorously analyze the impacts of potential policies and programs that are under discussion. The reporting rule is needed to provide such data.

Commenter Name: Benjamin Brandes
Commenter Affiliation: National Mining Association (NMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0466.1
Comment Excerpt Number: 7

Comment: NMA believes that the currently proposed threshold will result in tremendous paperwork burdens on regulated entities, and associated administrative burdens on EPA itself. The unnecessary data that will be produced if the proposed threshold is maintained will do little to further EPA's environmental policy objectives. NMA requests, therefore, that EPA further analyze emissions thresholds above the proposed 25,000 mt CO_2e.

Response: See the preamble for the response on selection of the threshold. Regarding the paperwork burden, see also the preamble discussions on the general content of the annual report and the Paperwork Reduction Act. Also see the preamble for discussion of the electronic reporting system and other materials EPA is providing to reduce the reporting burden.

Commenter Name: Angela Burckhalter
Commenter Affiliation: Oklahoma Independent Petroleum Association (OIPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0386.1
Comment Excerpt Number: 7

Comment: EPA proposes a 25,000 mt CO_2e threshold. We don't think this threshold should be reduced to lower levels as it will create greater burdens on the reporting entities without providing significant benefits. In addition, it doesn't appear EPA evaluated thresholds between 25,000 and 100,000 mt CO_2e. We request EPA evaluate the cost/benefits of selecting a threshold between these two limits to determine if less facilities could be impacted while still allowing EPA to obtain a reasonable level of emission data. As previously stated, we request that EPA distinguish the use of natural gas in the final rule and allow an aggregate of 50 mmBtu/hr for combustion units at all facilities using natural gas which is under the 25,000 mt CO_2e threshold.

Response: See the preamble for the response on selection of the threshold. Regarding a mmBtu/hr level for natural gas, see the preamble and comment response document volume for subpart C, stationary fuel combustion.

Commenter Name: Michael A. Palazzolo
Commenter Affiliation: Alcoa, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0650.1
Comment Excerpt Number: 5

Comment: We recommend that EPA re-evaluate the reporting threshold selected for "downstream facility" emissions with the goal of minimizing the industry reporting burden and reducing government data review costs. EPA's data analysis for "Downstream Facility and Emissions Coverage" shows that 13,000 facilities (54.9% of emissions) are covered by a 25,000 tpy threshold while only 6600 facilities (52.4% of emissions) are covered by a 100,000 tpy threshold. EPA's selection of the lower reporting threshold increases coverage of downstream facility emissions by only 2.5%, but doubles the number of facilities that must report into the program. EPA could therefore cut continuing costs for the program in half with almost no loss in data.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Christina T. Wisdom
Commenter Affiliation: Texas Chemical Council (TCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0638.1
Comment Excerpt Number: 5

Comment: TCC supports a threshold of 100,000 metric tons carbon dioxide equivalent (CO_2e) per year, rather than the proposed threshold of 25,000 metric tons CO_2e or more per year. From the chemical industry's standpoint, the difference between the two thresholds in percentage of greenhouse gas emissions that would be reported is relatively small. For example, one TCC member company analyzed the impact of reporting at three annual emission threshold quantities: 25,000 metric tons, 50,000 metric tons and 100,000 metric tons. The analysis compared both the percentage of the company's facilities that would need to report, as well as the percentage of total company greenhouse gas emissions reported from all sources meeting the threshold. The results of this analysis indicated that at a reporting threshold of 100,000 metric tons CO_2e, greater than 90% of the company's greenhouse gas emissions would be reported. Furthermore, only one-third of the company's facilities would be required to report. The example demonstrates that setting a higher threshold will both lessen the reporting burden for companies and result in only a small difference in greenhouse gas emissions being reported. Accordingly, TCC respectfully requests that EPA raise the reporting threshold to 100,000 metric tons CO_2e.

Response: See the preamble for the response on selection of the threshold. The example provided by the commenter is for only one company. Other companies will have different size facilities and the percent of each company's facilities reporting and percent of overall corporate emissions reported under each threshold options would be different for each company. EPA's threshold analysis considered the number of facilities and emissions reported in each source category and the total for all source categories combined. This information is provided in the preamble section on economic impacts and the Regulatory Impacts Analysis (RIA).

Commenter Name: Stephen B. Kemp
Commenter Affiliation: Occidental Chemical Corporation (OCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0644.1
Comment Excerpt Number: 5

Comment: The statutory provisions associated with EPA's requirement to propose and issue a GHG reporting rule did not set forth any reporting thresholds, and simply directed EPA to publish a draft rule to require mandatory reporting of GHG emissions "above appropriate thresholds in all sectors of the economy of the United States." In the preamble to the proposed rule, on page 16467, EPA summarized one viewpoint with respect to an appropriate threshold: "Furthermore, many industry stakeholders that EPA met with expressed support for a 25,000 metric ton of COie threshold because it sufficiently captures the majority of GHG emissions in the U.S., while excluding smaller facilities and sources." Our data indicate, however, that the proposed threshold of 25,000 Metric Tons of CO/-e is far too low, in that it would unreasonably require too many small sources and facilities to report. For example, a single boiler that combusts a little over 30 MMBTU per hour of natural gas on an annual basis would emit approximately 25,000 Metric Tons per year of CO_2-e. Typically, a boiler of this capacity is characterized as a small industrial or institutional boiler, capable of generating perhaps 15,000 pounds per hour of steam. Such units are not found at large locations, but rather at small industrial sites and commercial institutions – such as hospitals and universities. Not only are emissions from such sources inconsequential with respect to their potential contribution to the accumulation of GHGs in the atmosphere, these types of facilities are not likely to have the technical expertise, systems or financial resources for reporting and managing the information required by the proposed rule. With respect to OCC facilities, the following table summarizes our recent GHG emission rate data: [See DCN:EPA-HQ-OAR-2008-0508-0644.1 for table show recent GHG emission rates for OCC facilities. Note: under the proposed threshold, 68% of OCC

facilities representing 99% of OCC GHG emissions would be covered. As a threshold of 100,000 tons of CO_2e, 36% of OCC facilities representing 93% of OCC GHG emissions would be covered.] A threshold of 100,000 Metric Ton per year of CO_2-e would capture emissions reporting for greater than 90 percent of OCC's annual GHG emissions, and would exclude the small and inconsequential facilities from the need to report and maintain information. Reporting at the 100,000 metric ton annual threshold would also be consistent with the requirements of the European Union Emissions Trading Scheme for general industrial sources, and Environment Canada's mandatory GHG reporting rules. We strongly recommend that a reporting threshold of 100,000 Metric Ton per year of C07-e emissions be incorporated into the final reporting rule and that the language at proposed §98.2 (and other pertinent sections) be modified accordingly.

Response: See the preamble for the response on selection of the threshold. Regarding the comment on reporting by natural gas sources above 30 mmBTU/hr, the 30 mmBTU/hr cutoff in the rule is based on burning goal. Guidance materials for the final rule provide higher applicability screening values for other fuels such as natural gas. See the preamble section on applicability determination and the preamble section and comment response volume on compliance and enforcement for additional discussion of guidance and tools being provided to assist facilities.

For the response on reporting by commercial and institutional facilities above the threshold, see the response to comment EPA-HQ-OAR-2008-0508-0423.2, excerpt 1. We also note the percent of emissions and facilities covered presented by this commenter are for one company; see the response to comment EPA-HQ-OAR-2008-0508-0638.1, excerpt 5.

Commenter Name: See Table 13
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0425.1
Comment Excerpt Number: 7

Comment: CLA submits that any facility that implements technology to destroy carbon or convert GHGs with high global warming potential to those GHGs with a lower global warming potential should be allowed to account for the net carbon reduction in their GHG emissions estimates. Therefore, CLA supports the "emissions threshold" approach, which takes into account and deducts methane that is destroyed from the total methane generation. However, any operation that expends the capital necessary to utilize or install carbon reduction technologies resulting in emissions falling below the threshold level should no longer be required to report GHG emissions to the EPA.

Response: See the preamble to the final rule for the response on the selection of the threshold. The thresholds are based on actual emissions from the sources for which the rule contains methodologies; however, for reasons explained in the preamble discussion of source categories to report, offsets are not reported or considered in the emissions calculations. Also as explained in the preamble, provisions were added to the final rule to allow reporters to cease reporting if emissions are reduced sufficiently and the reporter meets specified conditions.

Commenter Name: Mark R. Vickery
Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)
Document Control Number: EPA-HQ-OAR-2008-0508-0666.2

Comment Excerpt Number: 6

Comment: The Executive Director of the TCEQ believes the greenhouse gas reporting rule with a proposed threshold of 25,000 metric tons (mt) of carbon dioxide equivalent (CO_2e) emissions will require an additional reporting burden to sources without a commensurate inventory improvement. The proposed reporting threshold of 25,000 mt CO_2e will only provide information on approximately 3,869 of the 7,054 Million mt CO_2e from all sources estimated in 2006. Electricity generation is responsible for most of these emissions (2,262 million metric tons CO_2e or 58% of the proposed regulated emissions), which are already reported quarterly into the Acid Rain database. The administrative burden of additional reporting required by this rule, estimated at $218 million dollars annually, is not compensated with a significant inventory improvement. The EPA considered thresholds of 1,000; 10,000; 25,000; and 100,000 mt CO_2e when developing this proposed rule. The proposed threshold of 25,000 mt CO_2e requires reporting from 13,205 sources (including 1,108 from electricity generating sources) and encompasses 54.9% of the total estimated U.S. emissions. The Executive Director of the TCEQ recommends using the higher threshold of 100,000 tons. This higher threshold would reduce the reporting burden by 50 percent with 6,598 sources reporting while still including 52.4% of the U.S. emissions. If the higher threshold for all sources is not adopted, a mixed reporting threshold to obtain representative sampling, dependent upon the source category, is recommended. Raising the threshold for food processing, stationary combustion, manure management, oil and natural gas, and landfills would obligate an estimated 4,655 fewer sources to report with a corresponding loss of less than 1.7% of emissions. [see DCN:EPA-HQ-OAR-2008-0508-0666.2 for table showing the reductions obtained by raising reporting thresholds for select categories]. For example, raising the stationary combustion to 100,000 mt CO_2e would impact 2,000 fewer sources (Table 4-81. Number and Share of Entities and Emissions Covered by Threshold, Regulatory Impact Analysis [RIA] for Mandatory Reporting of Greenhouse Gas Emissions Proposed Rule, March 2009) with a loss of approximately 50 million of the 7,054 million mt CO_2e estimated for 2006.

Response: See the preamble for the response on selection of the threshold. Regarding the suggestion to have different threshold for different source categories, see the preamble and the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 15. Also note that at this time EPA is not going final with the food processing and oil and natural gas systems subparts. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on these subparts at this time.

Commenter Name: Melinda L. Tomaino
Commenter Affiliation: Associated General Contractors of America (AGC)
Document Control Number: EPA-HQ-OAR-2008-0508-0628.1
Comment Excerpt Number: 6

Comment: In the proposed rule, EPA has identified three thresholds above which facilities would be required to report GHG emissions from stationary fuel combustion sources on an annual basis: 10,000, 25,000, and 100,000 metric tons per year of carbon dioxide equivalent (metric tpy CO_2e). EPA also has stated its preferred option is to require reporting at the 25,000 metric tpy CO_2e threshold. AGC suggests EPA set the reporting threshold at 100,000 metric tpy CO_2e, because the two lower options EPA has proposed would drastically increase the number of facilities required to report and the associated costs of reporting without a significant increase in the percent of emissions reported. EPA's own analysis for "Downstream Facility and

Emissions Coverage" shows that the number of affected facilities doubles at the 25,000 metric tpy CO_2e level (13,205 facilities) as opposed to the 100,000 metric tpy CO_2e level (6,598 facilities), whereas the percentage of emissions reported at the 25,000 metric tpy CO_2e level increases by only 2.5 percent. In addition, the facilities that emit 100,000 metric tpy CO_2e would likely already have experience and systems in place to monitor and measure air emissions. This threshold would require less outreach, compliance assistance resources, enforcement, and financial and staff resources from EPA; and the reduced number of affected facilities would allow for a smoother implementation of the reporting program. Should EPA set the reporting threshold at 25,000 metric tpy CO_2e level, thousands of small emitters (likely, small businesses) could be required to report—and would need to do so within a very short timeframe. In addition, the 25,000 metric tpy CO_2e threshold is set so low that many other businesses—uncertain about the amount of emissions from their facilities—would have to shoulder the expense of measuring their emissions to determine whether they are required to report and also to gain the security of having those data available should their emissions level ever come into question. EPA estimates that "approximately 30,000 facilities would have to assess whether or not they had to report..."Again, these facilities would need to make this determination within a very short timeframe. Setting the reporting threshold at 100,000 metric tpy CO_2e would decrease the emissions data reported by only 2.5 percent, yet it would release approximately 6,600 facilities from the burden of reporting and countless thousands of other facilities from the obligation and expense to measure solely to demonstrate non-applicability.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0572.1, excerpt 4, regarding the facilities that will need to calculate emissions to determine applicability. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses.

Commenter Name: Janice Adair
Commenter Affiliation: Western Climate Initiative (WCI)
Document Control Number: EPA-HQ-OAR-2008-0508-0443.1
Comment Excerpt Number: 7

Comment: WCI recommends a reporting threshold of 10,000 metric tons CO_2e emissions per year. Given that 25,000 metric tons CO_2e is a likely threshold for future emissions reduction mandates and/or GHG emissions trading programs, WCI believes it is important to have emissions data for sources below this threshold to monitor leakage of emissions to smaller sources, so that WCI can adjust the program as necessary, such as altering facility definitions. Emissions data for smaller sources will also be essential for monitoring competitiveness concerns in industries with sources both above and below the threshold. It is in such industries that regulatory restrictions on emissions are most likely to result in shifting of production and emissions to smaller sources to avoid regulatory requirements. We note also that a reporting threshold of 10,000 metric tons CO_2e is specified in the current comprehensive House legislation on climate change, known as the Waxman-Markey bill. EPA expresses concern that a 10,000 metric ton threshold would impact small businesses, hospitals, commercial establishments, and schools. In the final draft WCI Essential Requirements, facilities between 10,000 and 25,000 metric tons CO_2e are only required to report using simplified methods, and verification is limited to regulatory agency review. We recommend a similar approach in the federal program.

Response: See the preamble for the response on selection of the threshold. A reporting requirement for sources above 10,000 metric tons would increase the number of facilities

reporting direct emissions from approximately 10,000 facilities to over 16,000 facilities, and would increase the burden on small entities and small businesses.

Commenter Name: Benjamin Brandes
Commenter Affiliation: National Mining Association (NMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0466.1
Comment Excerpt Number: 6

Comment: EPA proposes in the preamble a reporting threshold of 25,000 metric tons of CO_2 equivalent (mt CO_2e). 74 Fed. Reg. 16,467. Although EPA considered alternative emissions thresholds (1,000, 10,000 and 100,000), it is unclear why emissions thresholds in the 25,000 - 100,000 mt CO_2e range were not considered. NMA endorses EPA's stated objective of minimizing the reporting burdens on impacted entities while capturing a maximized percentage of emissions data. Id. NMA believes, however, that EPA should analyze emissions thresholds above 25,000 mt CO_2e. Comments submitted by the National Association of Manufacturers (NAM) indicate that by raising the threshold to 100,000 mt CO_2e, EPA could drastically reduce the number of impacted manufacturers from approximately 13,000 reporters to approximately 6,500 reporters, while still capturing more than 82 percent of estimated GHG emissions. This information demonstrates that EPA's stated goals of maximizing emissions reporting while excluding small emitters, and reducing the compliance burdens on impacted entities, can be fully achieved at threshold levels higher than what is currently proposed.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Jay M. Dietrich
Commenter Affiliation: IBM
Document Control Number: EPA-HQ-OAR-2008-0508-0978.1
Comment Excerpt Number: 1

Comment: A reporting threshold of 25,000 tons per year (tpy) of CO_2 equivalent (CO_2e) appears to be a reasonable threshold for reporting of GHG inventories. This position is based on both the details of the analysis performed by EPA (page 16482) and IBM's evaluation of the GHG emissions inventory for its facilities located in the United States.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Paul Glader
Commenter Affiliation: Hecla Mining Company
Document Control Number: EPA-HQ-OAR-2008-0508-0579.1
Comment Excerpt Number: 5

Comment: EPA proposes in the preamble an apparently arbitrary reporting threshold of 25,000 metric tons of CO_2 equivalent (mt CO_2e). Although EPA considered alternative emissions thresholds (1,000, 10,000 and 100,000), it is unclear why emissions thresholds in the 25,000 – 100,000 mt CO_2e range were not considered. The threshold of 100,000 mt CO_2e drastically reduces the number of reporting entities while capturing more than 82 percent of estimated GHG. EPA has a stated goal of maximizing emissions reporting while excluding small emitters,

and reducing the compliance burdens on impacted entities. By not evaluating emission thresholds from 25,000 to 100,000 mt CO_2e, EPA has failed to thoroughly evaluate sufficient thresholds to best achieve their own goals. EPA should evaluate thresholds between 25,000 and 100,000 mt CO_2e and increase the threshold to one that reduces reporting entities yet captures significant GHG emissions

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Lee Lemke
Commenter Affiliation: Georgia Mining Association (GMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0276.1
Comment Excerpt Number: 4

Comment: The threshold should be set at 100,000 metric tons of CO_2e rather than 25,000 metric tons of CO_2e . Doing so would only reduce the emissions reported by 4%, according to Table VIII-2 of the Preamble ((3,870 metric tons CO_2e – 3,699 metric tons CO_2e) / 3,870 metric tons CO_2e), which reduces the number of affected entities by 50%. This would allow the program goals to be achieved with far less compliance burden to the regulated community. Furthermore, reducing the number of entities reporting, at least initially, would allow for a smoother implementation of the program.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Keith Overcash
Commenter Affiliation: North Carolina Division of Air Quality (NCDAQ)
Document Control Number: EPA-HQ-OAR-2008-0508-0588
Comment Excerpt Number: 5

Comment: Although we accept the rationale for selecting the 25,000 metric tons (MT) CO_2e /yr threshold, EPA should examine whether this level will provide the type of data needed for future climate change policies. For example, the GHG emission reduction targets in the Waxman/Markey bill, if approved by the Congress, may affect facilities emitting down to 10,000 MT CO_2e /yr. The proposed rule will not cover the lower-emitting facilities, and EPA may end up with an incomplete data set that may not be adequate for a cap and trade program.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Robert P. Strieter
Commenter Affiliation: The Aluminum Association
Document Control Number: EPA-HQ–OAR-2008-0508-0350.1
Comment Excerpt Number: 7

Comment: We recommend that EPA re-evaluate the reporting emission threshold selected for non-listed facilities with the goal of minimizing the industry reporting burden and reducing government data review costs. EPA's data analysis for "Downstream Facility and Emissions Coverage" shows that 13,000 facilities (54.9% of emissions) are covered by a 25,000 tpy emission threshold while only 6600 facilities (52.4% of emissions) are covered by a 100,000 tpy

threshold. Therefore, selecting the lower reporting threshold increases coverage of downstream facility emissions reporting by only 2.5%, but doubles the number of facilities that must report into the program. To improve the cost- effectiveness of the reporting program, EPA should reconsider the 100,000 ton threshold or, at a minimum, consider an intermediate 50,000 ton threshold in lieu of the 25,000 ton proposal.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Dan Elwell
Commenter Affiliation: Aerospace Industries Association (AIA)
Document Control Number: EPA-HQ-OAR-2008-0508-1140.1
Comment Excerpt Number: 6

Comment: EPA is urged to set the reporting threshold higher to emissions of 100,000 tons of CO_2 per year. This threshold reduces the number of facilities reporting by approximately half, while capturing almost the same emissions percentage, according to EPA's own data analysis.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Robert Garfield
Commenter Affiliation: American Frozen Food Institute (AFFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0402.1
Comment Excerpt Number: 2

Comment: AFFI believes that for source categories contributing relatively insignificant amounts of GHG emissions (i.e., below 0.5% of nationwide CO_2e emissions), EPA should use alternative, conservative reporting thresholds that are tied to the status of a source category facility as a Title V major source rather than the capacity of particular facilities to emit GHGs. AFFI respectfully recommends this approach for three reasons. First, AFFI estimates that excluding non-Title V facilities from GHG reporting will not adversely affect the quality or reliability of EPA's GHG collection efforts. Even if the reporting requirements excluded every single food processing facility—an overly- conservative assumption given that at least some food processing facilities fall under Title V—EPA would miss detailed emissions data only from some 0.161% of nationwide GHG emissions [Footnote: Using AP-42 emission factors, a natural-gas-fired boiler would need to have a capacity of some 171 MMBtu/hr to emit 100 tons per year NOx, while at the same time emitting only 78,000 MT CO_2e /yr. Using the Title V threshold approach, the 30 MMBtu/hr stationary fuel combustion threshold would need to be altered for qualifying source categories]. And reporting under the rule of natural gas deliveries by local distribution companies would provide EPA with a separate source of data from which to calculate GHG emissions from the combustion of natural gas. Second, major sources under Title V are already accustomed to managing sophisticated monitoring, recordkeeping, and reporting requirements. As a result, those facilities already have internal QA/QC procedures in place, have designated representatives responsible for compliance, and have staff that are well-qualified to include GHG monitoring, recordkeeping, and reporting in the normal operation of the facility. In short, Title V facilities already have the foundations in place to support the additional burden of GHG reporting. Last, the burden of monitoring, recordkeeping, and reporting on small-to-medium-sized facilities unaccustomed to detailed federal environmental compliance outweighs the minor benefits achieved by collecting detailed GHG emissions data from such an insignificant source category.

In recent testimony to Congress, Administrator Jackson has reiterated that EPA's GHG policies are not designed to adversely impact smaller businesses. Limiting the scope of the proposed rule as we have suggested is a step towards avoiding those adverse impacts. As well, most of these food processing facilities use efficient natural gas as the primary fuel source to meet FDA and USDA processing requirements for safe and wholesome food products. Taken together, including non-Title V sources in a source category that contributes less than 0.5% to nationwide GHG emissions appears to be contrary to EPA's stated goal of "[b]alanc[ing] the rule coverage to maximize the amount of emissions reported while excluding small emitters," and may be contrary to Congress' directive to require reporting of GHG emissions "above appropriate thresholds." [Footnote: Consolidated Appropriations Act, 2008, Pub. L. 110-161, 121 Stat. 1844, 2128 (2008). AFFI also notes that EPA has not estimated the incremental GHG emissions to be reported at different threshold levels, making it very difficult to determine whether the 25,000 MT CO_2e /yr threshold for the food processing source category is reasonable. Compare Table M-1 with Table N-1, 74 Fed. Reg. 16,507–508.]

Response: See the preamble for the response on selection of the threshold regarding the comment that only Title V sources should report emissions, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6.

Regarding the commenter's mention of the food processing source category, EPA is not going final with the food processing subpart, so food processing facilities would be required to report only if they meet the rule applicability criteria due to other sources at the facility (e.g., if the facility has stationary fuel combustion source emissions above the threshold). As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on the food processing subpart at this time.

Commenter Name: Calvin B. Parnell, Jr.
Commenter Affiliation: Texas A&M University et al.
Document Control Number: EPA-HQ-OAR-2008-0508-0667.1
Comment Excerpt Number: 6

Comment: The 25,000 tonnes mandatory emission threshold for reporting relative to the total mass of GHG emitted in 2005 is very low threshold. The reductions by 2020 mandated by the H.R.2454 are approximately 2 billion tons (2* 109 tonnes). 25,000 tonnes are less than 0.2% of the total reduction mandated by 2020. Why has EPA listed such a low threshold? The many "small emitters" of GHG will be spending much effort to comply with no net benefit to the goal of reducing the atmospheric concentration of CO_2e.

Response: See the preamble for the response on selection of the threshold. We also note that H.R.2454, the draft Waxman-Markey bill, includes a 10,000 metric ton CO_2 per year threshold for reporting to the registry.

Commenter Name: Carl H. Batliner
Commenter Affiliation: AK Steel Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0337.1
Comment Excerpt Number: 9

Comment: The General Provisions of the proposed rule require any facility having combined stationary fuel combustion equipment with a maximum heat input capacity greater than 30 MMBtuihr and total annual GHG emissions greater than 25,000 metric tons to report their emissions. This would seem to include a multitude of facilities that are not accustom to being subject to regulatory requirements such as large office buildings, sports arenas, shopping centers and malls, libraries, universities, hospitals, military bases, movie theatre complexes, theatres, museums, etc. How does EPA intend to provide an outreach program to ensure that these facilities are aware of their reporting obligation and their emissions accounted? Since the reporting information will be used to establish permitting regulations and cap-and-trade legislation, how will EPA ensure these facilities are addressed for those requirements? If these facilities fail to report, how will EPA be able to identify them and will there be any enforcement action taken? AK. Steel believes that EPA did not intend to require these sources to report. Accordingly, AK. Steel suggests that EPA consider a reporting threshold of 100,000 metric tons ofC02e instead of 25,000 metric tons for stationary fuel combustion sources.

Response: See the preamble for the response on selection of the threshold. For the response on reporting by commercial and institutional facilities above the threshold, see the response to comment EPA-HQ-OAR-2008-0508-0423.2, excerpt 1. EPA is performing extensive outreach for the rule as described in the preamble sections and comment response volumes on applicability determination and on compliance and enforcement. Also see the preamble for the response on enforcement of the rule.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 8

Comment: Marathon opposes any threshold lower than 25,000 tonnes CO_2e per year, but requests that the threshold be raised to 100,000 tonnes CO_2e per year. In EPA's analysis of a reporting threshold they mention that the 100,000 metric ton of CO_2e threshold would severely fragment large industrial sectors. This is not an accurate statement specifically if one looks at the example provided in the preamble. Large industrial sectors are listed source categories and required to report regardless of the proposed threshold. In the example used in the proposed rule on page 74 FR 16468, ammonia manufacturing, nitric acid production, and lime manufacturing are specified. In this case, the EPA said that there were multiple facilities within these industries that would not have to report due to the fact that the facilities would not reach the 100,000 tonne CO_2e threshold. All of these sources are listed source categories and because of this, all facilities would have to report regardless of their annual emissions rate. For this reason, Marathon would request that the threshold limit be raised to 100,000 tonnes CO_2e per year for facilities that are not a listed source category to prevent over burden of small facilities. This clarification would also nullify EPA's argument that by excluding certain facilities it would not cover key sectors of the economy. Again, since source categories that are key sectors of the economy are listed, the facilities within them will continue to be covered regardless of the tonnage threshold. Marathon also supports EPA's conclusion that the 1,000 and 10,000 tonnes CO_2e reporting thresholds would place an enormous cost burden while creating little to no statistically relevant benefit.

Response: See the preamble for the response on selection of the threshold. Regarding fragmentation, see the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 15.

Commenter Name: Jo Ann Emerson
Commenter Affiliation: U.S. House of Representatives
Document Control Number: EPA-HQ-OAR-2008-0508-0341
Comment Excerpt Number: 4

Comment: EPA's Choice of an Applicability Threshold is Overly Burdensome The choice of a hybrid model, utilizing an annual 25,000 metric-ton C02e threshold for a majority of facilities, adds a significant and unnecessary burden on the American economy. EPA has estimated that the mtC02e 25,000 Hybrid threshold will cost $168 million, $59 million more than the mtC02e 100,000 threshold. This choice, in spite of adding significant costs to the American economy, will result in only 2.5% more emissions covered by the reporting requirements. The burdensome standard chosen by EPA not only increases costs by 35% in exchange for a mere 2.5% in additional emissions coverage, but the standard also increases the number of facilities which must report by more than double. Under the mtC02e 100,000 threshold, only 6,598 facilities would be required to report to EPA, but under the mtC02e 25,000 Hybrid threshold more than 13,200 facilities would likely report. The Environmental Protection Agency explains away their choice of the more burdensome standard as a result of: (1) the lower standard may exclude enough emitters in certain source categories such that the emissions data would not adequately cover key sectors of the economy, and (2) a preference for harmonization with State and international reporting requirements so as to ensure the data gathered can support analyses of future policy options. (p. 16468). The FY 2008 Consolidated Appropriations Act speaks only to a requirement that all sectors of the economy should be addressed, not all facilities in a sector of the economy. The Administrator's decision to require reporting at mtC02e 25,000 Hybrid threshold because of concern regarding "fragmentation" of facilities among a sector goes beyond Congressional intent. The information to be gained appears to minimal; however, the cost is clearly significant. Basing the decision on a preference for harmonization also does not meet the standard which should apply when such a significant cost on the American economy is imposed. It is difficult to envision how the ability of the data gathered to be able to support policy considerations would be tremendously impacted by increasing the emissions covered under the reporting rule by 2.5%. In the end, the additional costs of an mtC02e 25,000 Hybrid threshold compared to an mtCO2e 100,000 threshold cannot be justified, either by Congressional requirement or EPA discretion. I hope these arguments are reflected in a final rule which lifts the threshold for reporting in order to exempt small and medium-sized businesses, to limit compliance with the rule to a voluntary basis, or both. Enterprising Americans businesses, particularly in the manufacturing and agricultural sectors of the Southern Missouri economy, should serve as a very good example of why cautious actions by the EPA are necessary to preserve American competitiveness in those same markets and to likewise preserve American jobs during one exceptionally difficult financial chapter in our nation's long history of innovation and prosperity.

Response: See the preamble for the response on selection of the threshold. Regarding fragmentation, see the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 15. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses.

Commenter Name: Robert Naerebout
Commenter Affiliation: Idaho Dairymen's Association, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0314.1

Comment Excerpt Number: 13

Comment: EPA never explains how the reporting threshold was selected or how the 1,000, 10,000, 25,000 and 100,000 tons C02e anthropogenic emission levels were developed. (591-92). Furthermore, the threshold levels that have been chosen (i.e. 1,000, 10,000,25,000, and 100,000 metric tons C02e) appear to have been arbitrarily selected. IDA found no references or justification for selecting these numbers. Are they environmentally relevant; what are the long-term global benefits? No one can be absolutely sure as the rulemaking is not transparent. It is imperative that the EPA produce the scientific evidence and other associated documentation with respect to the limits that were selected.

Response: See the preamble for the response on selection of the threshold. The selection of 25,000 metric tons was based on analyses and careful consideration of a number of factors as discussed in the preamble, and is not arbitrary. The analyses are documented in the technical support documents for the rule and the regulatory impacts analysis. Also see the preamble and the comment response document for Subpart JJ, Manure Management, for responses to comments on the threshold analysis and other technical issues specific to the manure management source category.

Commenter Name: Bryan Brendle
Commenter Affiliation: National Association of Manufacturers (NAM)
Document Control Number: EPA-HQ-OAR-2008-0508-1527
Comment Excerpt Number: 5

Comment: The NAM urges EPA to analyze data for potential emissions falling within the 25,000 and 100,000 tons of C02 Equivalent (tC02e) range. Although the proposal includes data on sources ranging from 1000 to 25,000 tC02e, there is a gap of emission thresholds not evaluated from the 25,000 to 100,000 tCO2e range. Many manufacturers believe that the EPA can accomplish its objective of creating a robust GHG inventory by raising the reporting threshold from its recommended 25,000 tC02e to 100,000 tC02e. By raising the threshold, EPA could drastically reduce the number of potential mandatory registrants from approximately 13,000 reporters to approximately 6500 reporters, while still capturing more than 82 percent of estimated aggregate GHG emissions. Not only will this policy reduce paperwork burdens and reporting requirements on covered entities, but it will also streamline the amount of data that regulators must analyze in order to implement the registry. Furthermore, EPA states in its proposal that its goal is to maximize the amount of emissions reported while excluding small emitters altogether. According to industry analysis, raising the threshold to 100,000 t CO_2e could also reduce reporting requirements on 30,000 entities that would have to perform emission analysis to verify whether or not they would exceed the proposed 25,000 tC02e threshold. Further analysis of the manufacturing sector illustrates that mandating reporting requirements at the 25,000 tC02e level would actually bring in facilities that are not classified under Title V of the Clean Air Act (CAA) as so-called "major sources." It would be burdensome for manufacturing facilities that aren't even required to report Hazardous Air Pollutants (HAPs), for example, to report their GHG emissions. Enforcing GHG emission reporting at the 25,000 tC02e threshold would yield enormous amounts of data, much of it duplicative of data that existing EPA-administered laws require sources to report. EPA would expend resources to analyze this data but make proportionately small progress towards environmental objectives of the inventory. The EPA could therefore fulfill broader environmental objectives by devoting budgetary and man-power resources towards implementing energy-efficiency and related measures that would

have the co-benefit of reducing the carbon intensity of the U.S. economy. For example, manufacturers already participate in the Energy Star program, a public/private partnership in which the the EPA and the U.S. Department of Energy promote energy efficient products and practices that save money and improve environmental quality. It is highly unlikely that imposing heavy regulatory burdens on small and mid-size manufacturers, who might otherwise invest in energy efficiency, would achieve EPA's stated goals. And, as noted above, such manufacturers represent a small segment of the U.S. GHG emissions profile. At a minimum, the EPA should present evidence explaining why it has not gathered significant data on thresholds ranging from 25,000 to 100,000 t CO_2e on which the public may comment.

Response: See the preamble for the response on selection of the threshold. Also see the response to comment EPA-HQ-OAR-2008-0508-0572.1, excerpt 4.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 9

Comment: NPRA believes a higher reporting threshold should be selected as the basis for any reporting threshold under the Mandatory GHG Reporting rule. NPRA believes that a higher reporting threshold will be more effective at gathering data on significant sources while providing a balance to the regulatory burdens added to the regulated community. As cited earlier in these comments, NPRA asserts that EPA's analysis of the regulatory impacts of this rulemaking underestimates the costs to the regulated community, and that a higher reporting threshold will reduce these costs. NPRA believes that this change to EPA's proposal will more closely parallel EPA's self-stated goal to "… develop a reporting rule that, to the extent possible and appropriate, would rely on similar protocols and formats of existing programs and, therefore, reduce the burden of reporting for all parties." NPRA believes that EPA's rationale for including combustion sources erroneously relies solely on emission factors for coal-based units. In considering the information included in this rulemaking's Docket, NPRA noted that liquid and gaseous fuel fired combustion sources have much lower emission rates than coal-fired units. For example, while a coal-based boiler at 30 MMBtu/hr may emit 24,697 tonnes annually of CO_2e, liquid fueled units over 35 MMBtu/hr and natural gas fired units over 50 MMBtu/hr approach the emissions proposed threshold of 25,000 tonnes. NPRA believes that EPA should provide for different fuel-types as a basis for presuming whether certain combustion units are included in the requirement to develop emissions estimates. NPRA noted that EU-based reporting schemes also use a higher threshold for unit capacity when setting reporting thresholds for combustion units. Using a higher threshold for unit capacity would still capture over 75% of the capacity of combustion sources (EPA-HQ-OAR-2008-03 18-0005). When considering the impacts to the regulated community, EPA excluded most commercial and all residential sources in the preamble to this rule. According to the preamble (74 FR No. 68, p 16469), the EPA assumed (footnote 57) that the boiler combustion sources would include three boilers at each manufacturing facility and 1 boiler at each commercial facility with rated heat inputs of >30 MMBtu/hr, producing a total of 30,000 affected sources that would have to assess whether they would be subject to the GHG reporting rule. Of these, the EPA estimated that only 17,000 of these facilities would be subject to reporting. EPA also noted that these sources generally don't individually contribute significant amounts of GHGs. Although NPRA feels that these estimated numbers are much too low, we observe that even 30,000 combustion sources, each of which emits at the threshold of 25,000 tpy of CO_2, represents a CO_2 emission rate of 750 million tons

per year, which is only ~10% of the overall estimated annual GHG emissions, so there are arguments for excluding this large number of relatively small sources. However, NPRA also noted that the proposed regulations place disproportionate reporting burdens on selected segments of the economy. When considering energy use, fossil fuel combustion at industrial sources had only 2.6% growth from 1990 to 2006, whereas the mobile, residential, and commercial sources increased more than 20%. Using 2006 data, industrial sources account for 28% of the CO_2e emissions and at these rates of growth will quickly be eclipsed. In addition, when considering CO_2e from fossil fuel combustion, industrial sources account for 15.3% of the source categories reported, while electricity, mobile, and commercial/residential/US Territories account for 41.3%, 32.9%, and 11.5%, respectively. Considering EPA's aforementioned goals, the regulatory burdens already placed on industrial sources subject to the proposed rulemaking, and that a higher reporting threshold will still capture 75% of the emissions from industrial sources, NPRA requests EPA to double the reporting threshold to 50,000 tonnes per year CO_2e.

Response: See the preamble for the response on selection of the threshold. Regarding the 30 mmBTU/hr heat input criteria in the rule (which is intentionally based on coal) and similar values for oil and natural gas, see the response to EPA-HQ-OAR-2008-0508-0644.1. Regarding the comment on the number of sources calculating emissions, see the response to comment EPA-HQ-OAR-2008-0508-0572.1, excerpt 4. Regarding economic impacts, see the preamble section on economic impacts and the Regulatory Impacts Analysis.

Commenter Name: Melissa Thrailkill
Commenter Affiliation: Center for Biological Diversity
Document Control Number: EPA-HQ-OAR-2008-0508-0430.1
Comment Excerpt Number: 6

Comment: EPA failed to adequately explain why, in its efforts to harmonize the Reporting Rule with reporting rules already adopted by some states, that conformity with California's rule overrides the benefits of conforming with other states' implementation rules. While the 25,000 metric ton threshold does fall in line with California's rule, California is not the only state mandating GHG emissions reporting. See, e.g., Sierra Club, et. al., letter (detailing other states' requirements). The EPA has again failed to justify why it proposed the higher threshold when other states use lower levels.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: See Table 14
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0635
Comment Excerpt Number: 10

Comment: As time passes, it will become appropriate to lower the threshold still further. EPA must build periodic reassessments of the threshold value into the rule in order to ensure that the rule meets EPA's goal of providing a comprehensive inventory of greenhouse gas emissions. In general, the initial proposed reporting thresholds fall towards the high end of recent reporting rules. As EPA's review of state reporting rules indicates,38 lower thresholds are common nationally. Massachusetts, for instance, has a 5,000 short ton threshold,39 Oregon a 2,500 Mt CO_2e threshold,40, and Washington state plans a 10,000 Mt CO_2e threshold.41 The Western

Climate Initiative also intends to use a 10,000 Mt CO_2e threshold. [footnote: See 310 CMR 7.71 (3)(a)(2).; See OAR 340-215-0030.; See Proposed Chapter 173-441 WAC.; See Testimony to the U.S. EPA on the Proposed Mandatory Greenhouse Gas Reporting Rule on Behalf of the WCI Partner Jurisdictions (Apr. 16, 2009)] EPA could, in other words, have set a lower threshold which would have been consistent with reporting requirements in many jurisdictions. If anything, EPA's present threshold takes a conservative approach, exempting many facilities which may be of policy relevance. EPA's decision to use the 25,000 Mt CO_2e threshold for most industries, which is consistent with that used by California, and to require all facilities in some sectors to report, nonetheless does strike an initially sensible balance, based on the data EPA provides.[footnote: See 17 CCR §§ 95101].EPA presently believes that that threshold will allow it to cover 85-90% of U.S. emissions with only 13,205 reporters, and that lowering the threshold to 10,000 Mt CO_2e would nearly double reporters while adding only an additional percentage of coverage. If these estimates are correct, setting the general threshold at 25,000 Mt CO_2e will achieve substantial emissions coverage without putting a new reporting burden on small businesses and other relatively minor emitters. But even supposing that EPA's proposed initial threshold is proper, there are several reasons why EPA should commit to reconsider whether to lower it after the reporting rule goes into effect and EPA gains experience collecting this information on an economy wide basis: First, EPA does not now have facility-specific emissions data that it can use to test its threshold determination. Once data begins to flow into the agency, it will better be able to judge whether its current estimate of the extent of coverage achieved by the proposed threshold was correct. It should use this data to reassess its choices, rather than relying solely on its initial estimates. Second, some facilities emitting significant amounts of GHGs may fall just slightly below the threshold. Depending on the size of this class of facilities, its cumulative emissions may well reach significant levels. As emissions control efforts accelerate, it may become appropriate to directly monitor this population. Third, measuring emissions makes reducing them possible. Particularly if EPA or Congress opt to reduce emissions through a market-based mechanism, small emitters may wish to reduce their emissions to limit their own exposure, to improve their public image, or to offer allowances to other facilities. Measuring their emissions as part of the standardized national scheme will help keep reporting mechanisms uniform and will help businesses identify areas where they could reduce their impact. Fourth, reducing the reporting threshold to 10,000 Mt CO_2e per year could potentially bring the EPA reporting system in line with likely future approaches to reduce emissions at the national, international, regional or state level. For example, the draft American Clean Energy and Security Act currently before Congress proposes a reporting threshold of 10,000 Mt CO_2e for some industry segments. In sum, as the reporting rule goes into force and national climate policy matures, lowering the threshold – whether to 10,000 Mt CO_2e or to some intermediate figure – is likely to become necessary. EPA will be able most readily to contribute information helpful to the policy process and to respond to future enactments if it commits to a review procedure in the rule itself. Embedding that decision point in the rule will ensure that EPA can swiftly make a decision, and will also shape data-gathering strategies to best assess the 25,000 Mt CO_2e threshold, and other elements of the rule. For all of these reasons, EPA should establish in the rule's text a schedule for a published decision within two years of the rule's effective date. It also should provide for periodically reassessing the threshold, on a cycle no longer than five years beginning with the initial reassessment, or upon filing of a petition demonstrating that new data warrants a review in the interim period.

Response: See the preamble for the response on selection of the threshold. Regarding the comment that EPA commit to reevaluating thresholds on a specific schedule: At this time EPA is not establishing a deadline for reassessment of the threshold, however we recognize that revisions to the threshold might be necessary in the future to align this rule with requirements of

new legislation or new regulatory programs. Due to the uncertainty over when new legislation will be enacted and what regulatory approaches will be adopted, EPA has not added a specific deadline for EPA review the threshold or other aspects of this rule. By not including a specific deadline for review, EPA maintains the flexibility to amend the rule when new legislation is enacted, new programs are developed, or when changes become necessary or appropriate for other reasons, rather than revising the rule at some pre-determined time. Note that when the rule is revised, regulatory procedures will be followed including public notice and comment.

Commenter Name: Timothy O'Connor
Commenter Affiliation: Environmental Defense Fund
Document Control Number: EPA-HQ-OAR-2008-0508-0228h
Comment Excerpt Number: 8

Comment: One of the aspects of the California program and now that we are seeing in the federal program that's going to be very important is very inclusive reporting. Getting as many facilities as possible to the lowest possible threshold that I think we have identified here as between 25,000 tons if possible. We urge EPA to consider lowering that threshold in future years. I personally believe that as we lower the threshold, we start to capture more environmental justice benefits. As we include more sources that are below that threshold, we start to see sources that are really within our neighborhoods and within our communities. And that adage, what you measure you tend to manage, that is particularly true as we lower the threshold. I know that from some of the accounts of how many facilities we might be increasing in terms of reporting versus how many emissions we might be getting on percentage basis, there tends to be some argument that it is not worth it. If we don't get a lot of emissions bank, but we do get a lot of sources, we increase the amount of complexity and administrative unworkability, some people would say. I think it is very important for us to consider the other benefits we get through reducing that emissions threshold, and in particular environmental justice benefits.

Response: See the response to EPA-HQ-OAR-2008-0508-0635 excerpt 10.

Commenter Name: P. Horan
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0257.1
Comment Excerpt Number: 4

Comment: When reading about the 25,000 metric tons per year reporting standard, I was immediately struck at how high the threshold appeared to be. I am not a scientific type, so I truly am unaware of how many entities this would cover, but the 4500 automobile analogy led me to believe this was pretty high. I understand that this level is similar to other reporting standards already in place (i.e. California), but I would imagine there is a large population untouched, enough of a population to possibly change results. I immediately searched the proposal for your rationale and found that you reviewed two other thresholds as well in your drafting of the rule. I find these other thresholds to be insufficient when considering an efficient threshold. To have only considered 1,000 metric tons per year and 10,000 metric tons per year appears to be negligent at my first glance. Is there no chance that 15,000 and 20,000 metric tons per year could create more efficient information? I would appreciate it if the EPA would review these additional standards to see if they could make any improvement, as I stated before, I truly believe that this proposed rule is a step in the right direction toward a healthier environment.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: L. Selbst
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0253.1
Comment Excerpt Number: 3

Comment: The final requirement I have concerns with is the threshold itself. While I understand that setting the threshold at 25,000 tons per years is consistent with California's threshold, I would still recommend lowering this amount to either 20,000 tpy or 15,000 tpy. Although, as the EPA has previously found, the 25,000 tpy threshold would cover approximately 85-90% of emissions, lowering the threshold may pull in a few additional medium sized emitters. If one goal of the proposed rule change is to "raise awareness of emissions among reporters and other stakeholders", (pg. 16455) then getting additional emitters involved in this process would certainly better serve this goal. Furthermore, lowering the threshold would result in a broadened understanding of various industries. Also, including these emitters in this Process may assist the EPA in identifying specific actions that these medium sized reporters are taking that results in fewer emissions. It appears that the EPA has considered 3 other threshold levels than the 25,000 tpy. Two were significantly less at 10,000 tpy and 1,000 tpy (with one substantially higher at 100,000 tpy). However, I am slightly perplexed as to why a threshold between 10,000 tpy and 25,000 tpy was not considered. An emissions threshold of either 20,000 tpy or 15,000 tpy would not "double the number of facilities affected" (pg. 16468) as the 10,000 tpy threshold was found to do. This recommendation has support in other reporting programs. The state of New Jersey separates emitters into two different categories: facilities that emit over 25,000 tpy and facilities that have emissions between greater than 10,000 tpy but less than 25,000 tpy (see NJAC 7:27-21.11 and 21.12). While, New Jersey's proposal treats this lower emitting group with more lenient reporting standards, the fact that New Jersey requires some reporting from this group, acknowledges its value.

Response: See the preamble for the response on selection of the threshold. Also, see preamble for response to comments on the relationship of this rule to State rules and programs.

Commenter Name: Michael Gibbs
Commenter Affiliation: California Environmental Protection Agency
Document Control Number: EPA-HQ-OAR-2008-0508-0228m
Comment Excerpt Number: 2

Comment: We recommend a lower emissions threshold than the 25,000 metric tons of carbon dioxide equivalents included in the proposed rule for reporting purposes. For reporting the WCI partner jurisdictions have recommended a threshold of 10,000 metric tons for reporting. And it appears that the current Waxman Markey discussion draft similarly incorporates a 10,000 metric ton threshold, although the language is unclear and perhaps could benefit with some clarification. We have found in our deliberations there is a strong rationale for the lower threshold for reporting, and consequently believe that the federal requirements should be a floor and that the states should have the authority, the expressed authority, to have lower reporting thresholds.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0253.1, excerpt 3.

Commenter Name: Dale E. Furrow
Commenter Affiliation: The George Washington University School of Public Health MPH Candidate
Document Control Number: EPA-HQ-OAR-2008-0508-0219.1
Comment Excerpt Number: 2

Comment: According to the proposed rule, lower threshold alternatives (<25,000 metric tons) were considered, including 1,000 and 10,000 metric tons of carbon equivalent per year. Both were believed to broaden national emissions coverage, but to do so by "disproportionately increasing the number of affected facilities." However, no justification was presented regarding rejection of a 5,000 metric ton reporting limit. If the 1000 ton limit was rejected because the gains would not outweigh the costs, and the 10,000 ton limit was rejected because it would only improve national emissions data coverage by approximately 1 percent as reported, then perhaps a mid-level reporting limit would both broaden the coverage and proportionately increase the number of impacted facilities with a justifiable statistical advantage. According to a report issued by Goodwin and Procter released in March 2009, several US states (California, Connecticut, Massachusetts, New Jersey, Wisconsin, and Washington) have recently issued or proposed GHG reporting regulations. The regulations issued by the State of Massachusetts included a reporting limit of 5,000 tons per year. EPA should coordinate with the State of Massachusetts to consider the reason for selection of the 5,000 ton threshold and consider revising the 25,000 ton limit.

Response: See the preamble for the response on selection of the threshold. Also, as explained in the preamble, this reporting rule does not preempt or replace State rules, and States are free to collect additional information under State rules and programs.

Commenter Name: Anonymous
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0166
Comment Excerpt Number: 5

Comment: Consider raising the 25,000 metric ton threshold; maybe doubling it to 50,000 metric tons. This would reduce the burden on smaller sources.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: J. Southerland
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0165
Comment Excerpt Number: 14

Comment: 25,000 tons/year are emitted by many small sources and this may be too small to provide an appropriate lower cut-off for reporting An initial level with emissions similar to those from Title V facilities would seem to be appropriate to build a base of facilities and experiences. It would not be reasonable or productive to attempt to include a significant number of smaller facilities as their scale would require large numbers of facilities, thus cost and effort, to equal a very small number of large facilities such as electric generating units.

Response: See the preamble for the response on selection of the threshold. Regarding reporting by only Title V facilities, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses.

Commenter Name: William C. Herz
Commenter Affiliation: The Fertilizer Institute (TFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0952.1
Comment Excerpt Number: 49

Comment: EPA relies on the 2008 Consolidated Appropriations Act in promulgating the NPRM. That Act authorized EPA to propose (prior to Sept. 26, 2008) a rule "to require mandatory reporting of GHG emission above appropriate thresholds in all sectors of the economy of the United States." The 2008 Consolidated Appropriations Act thus limits EPA's authority to promulgate a GHG reporting rule not only in terms of time (a deadline EPA did not meet), but also in substance – EPA must establish appropriate reporting thresholds. The NPRM requires reporting from certain sources – including nitric acid, phosphoric acid and ammonia manufacturers – without any established "appropriate threshold." As such, assuming arguendo for the moment that EPA is authorized to promulgate the NPRM under the 2008 Consolidated Appropriations Act (despite its failure to meet the statutory deadline for such a rule), EPA must establish appropriate reporting thresholds for all sources regulated under the rule. If EPA persists in claiming that it is authorized to promulgate the NPRM under the 2008 Consolidated Appropriations Act, despite failing to propose the rule within the established time period, EPA should at minimum comply with the statutory requirement to establish appropriate reporting thresholds for all GHG emissions sources.

Response: See response to comments document for legal issues for a discussion regarding EPA's authority to require the information collected by this rule. See the preamble for the response on selection of the threshold. Regarding the comment on the lack of a threshold for the "all-in" source categories, see the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2. See the preamble sections and comment response documents for the individual source categories for responses to specific comments on the threshold analyses for each source category.

Commenter Name: William C. Herz
Commenter Affiliation: The Fertilizer Institute (TFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0952.1
Comment Excerpt Number: 50

Comment: EPA rightly expresses concern throughout the Preamble to the NPRM about avoiding increased costs to small business. The current economic climate makes any increase in regulatory compliance costs potentially devastating to small businesses. EPA states in the Preamble that it established the 25,000 metric ton CO_2-equivalent (CO_2e) reporting threshold to avoid regulation of small businesses. 74 Fed. Reg. at 16467. Given EPA's desire to avoid unnecessary imposition of increased costs to small businesses, EPA should revise the NPRM to apply the 25,000 metric ton threshold regardless of source in order to avoid undue costs to small businesses.

Response: See the preamble for the response on selection of the threshold. Regarding the comment that all source categories should have a 25,000 metric ton threshold, see the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2. In addition, as explained in the preamble, a provision has been added to the final rule to allow facilities to cease reporting if emissions are reduced below a specified level. This new provision applies to all facilities.

Commenter Name: Keith Overcash
Commenter Affiliation: North Carolina Division of Air Quality (NCDAQ)
Document Control Number: EPA-HQ-OAR-2008-0508-0588
Comment Excerpt Number: 9

Comment: NC DAQ's proposed rule, similar to a number of other state mandatory GHG reporting rules, requires reporting of GHGs by all Title V sources. For NC DAQ, inclusion of Title V sources would give a more complete assessment of the GHG emissions, potentially providing more opportunities for developing and implementing broader and more comprehensive mitigation strategies.

Response: See the preamble for the response on selection of the threshold. For the response on reporting by title V sources, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6. See the preamble for discussion for the relationship between this rule and State rules and programs.

Commenter Name: Meredith Niles
Commenter Affiliation: Center for Food Safety (CFS)
Document Control Number: EPA-HQ-OAR-2008-0508-0457.1
Comment Excerpt Number: 1

Comment: In the proposed rule, the EPA has chosen to apply the mandatory reporting requirement to, "downstream facilities that emit GHGs (primarily large facilities emitting 25,000 tpy of CO_2 equivalent GHG emissions or more) and to upstream suppliers of fossil fuels and industrial GHGs, as well as to manufacturers of vehicles and engines." According to the EPA, this threshold will capture between 85-90% of the total national U.S. GHG emissions, from approximately 13,000 facilities. However, the EPA also acknowledges that "most emission sources from the agriculture sector would not be covered by the rule, with the exception of livestock operations with GHG emissions from manure management systems that meet or exceed the threshold of 25,000 metric tons." Under such a definition, the EPA estimates that fewer than 50 very large livestock operations would meet such threshold and be required to report emissions. CFS and ICTA believe that the proposed threshold for mandatory reporting is too high to accurately gain a comprehensive understanding of emissions within the United States, particularly within the agriculture sector. The aim of mandatory reporting is to create an accurate and reliable database of emissions sources in the United States, which can be used to promulgate regulations or encourage legislation to reduce emissions. To achieve this goal, the EPA should strive to gather as much information from various sectors about emissions sources. While the overall rule would cover a significant portion of domestic emissions, it would not cover a significant portion of agricultural emissions, since the EPA notes that only about 50 farms would be covered. CFS and ICTA recommend that the threshold for reporting should be lowered to 10,000 tons of CO_2e to capture an accurate scope of emissions from all sectors. In particular, CFS believes that establishing a 10,000 ton threshold for the agricultural sector is especially

important to better understand sources of emissions within this sector, which have continued to increase in recent years and are usually emitted from a large number of small sources. In fact, according to the IPCC, "The global increases in carbon dioxide concentration are due primarily to fossil fuel use and land use change, while those of methane and nitrous oxide are primarily due to agriculture." As the IPCC concludes, our food and agricultural systems are contributing significantly to the increase in GHG emissions in the atmosphere every year, particularly in the form of CH_4 and N_2O emissions. While much of the climate change discussion has focused on CO_2, it is also crucial to consider CH_4 emissions- 21 times as potent as CO_2—and N_2O emissions-310 times as potent as CO_2. Globally, agriculture accounts for 60% of all human-induced N_2O emissions and 50% of all human-induced CH_4 emissions. [Smith, P. et al. (2008), Agriculture. In Climate Change 2007: Mitigation . Contrinution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (edc)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Pg. 499.] Estimates of food and agriculture GHG emissions, as a percent of total emissions, range between 14% to nearly one-third of all global emissions. Furthermore, the United Nations Food and Agriculture Organization estimates that animal agriculture accounts for 18% of global GHG emissions.xvi By comparison, the entire transportation sector emissions account for a little over 13% of total GHG emissions globally. [See DCN: EPA-HQ-OAR-2008-05-08-0457.1 for references.] In the United States, the EPA has estimated that the agricultural sector's emissions have climbed considerably since 1990. Between 1990 and 2007, CH_4 emissions from agricultural activities increased by 11 percent, while N_2O emissions increased by 5 percent. The continued increase in agricultural emissions coupled with the notable potency of most agricultural emissions are cause for concern and action. Only through accurate reporting of agricultural emissions sources can the EPA and policymakers have a clear sense of the actions needed to reduce agricultural emissions. Reducing the threshold for mandatory reporting to 10,000 tons of CO_2e will help to increase the number of agricultural entities reporting emissions, which will increase understanding for effective and efficient policymaking. While CFS and ICTA recognize that adopting a 10,000 ton threshold would require a much larger number of entities to report their emissions, we also acknowledge that political precedent has been set for doing so, especially within the agricultural sector. Recently, policymakers have already begun to consider variable emission levels within the agriculture sector when considering thresholds for regulation and standards. In the current legislation "American Clean Energy and Security Act" (H.R. 2454) in the House of Representatives, policymakers have proposed a different standard for the agricultural sector. The bill, which proposes to implement a "cap and trade" initiative, sets standards for the uncapped sector--including agriculture-- to be delegated by the EPA administrator. Under the current legislation, the bill would require that the EPA Administrator publish "an inventory of categories of stationary sources that consist of those categories that contain sources that individually had uncapped greenhouse gas emissions greater than 10,000 tons of carbon dioxide equivalent". The bill would then require the Administrator to establish standards and promulgate regulations for each sector of the uncapped emissions sources greater than 10,000 tons of CO_2e. Congress has recognized the unique emissions associated with agriculture by requiring such a list and setting the threshold for reporting and standards at 10,000 tons of CO_2e. CFS and ICTA encourage the EPA to do the same with their mandatory reporting rule to accurately capture the breadth of emissions in the agriculture sector.

Response: See the preamble for the response on selection of the threshold. For a discussion of why agricultural sources other than manure management are not covered by the reporting rule, see Section IV.B of the preamble to the proposed rule (74 FR 16466, April 10, 2009) and the section of the preamble for the final rule on source categories to report. For comments and

responses on manure management, see the preamble and comment response document for subpart JJ: Manure Management.

Commenter Name: Matthew Frank
Commenter Affiliation: Wisconsin Department of Natural Resources
Document Control Number: EPA-HQ-OAR-2008-0508-1062.1
Comment Excerpt Number: 2

Comment: The Department recommends that the reporting threshold be consistent with that contained in federal legislation, such as the Waxman-Markey bill. The current bill draft has a 10,000 metric ton threshold, while the rule has a 25,000 metric ton threshold. The Governor's Task Force on Global Warming recommended a 10,000 metric ton reporting threshold for all stationary sources in Wisconsin.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Melissa Thrailkill
Commenter Affiliation: Center for Biological Diversity
Document Control Number: EPA-HQ-OAR-2008-0508-0430.1
Comment Excerpt Number: 5

Comment: The CAA, in its current form, provides a framework with a proven track record of success to begin reducing greenhouse pollution immediately and transitioning to a clean energy future. The reporting rule must support immediate pollution reductions under existing CAA authorities, and as such should contain reporting thresholds that are parallel to permitting thresholds unless the agency demonstrates that such a structure is not necessary. The proposed 25,000 metric ton threshold is far above other relevant CAA thresholds. The agency fails to supply an adequate rationale for the discrepancy, but simply asserts that if sources emitting more than 250 tons of CO_2 per year were required to obtain permits, that the number of PSD permits issued each year would increase by more than a "factor of 10," resulting in 2,000-3,000 permits issued per year. Even accepting this statement at face value, and even accepting that a cost-benefit framework is appropriate in this circumstance, the agency is only looking at one side of a different equation – cost to the emitters from a permitting requirement. Here, the consideration is a reporting requirement, not a permitting requirement, and any such cost must be compared to the benefits of better information and more effective pollution reductions. The agency has not done so. While EPA should focus its efforts on the largest pollution sources, it does not follow that the agency should therefore exclude all emission sources below 25,000 tons from any reporting at all. Streamlining reporting and permitting requirements for the smaller sources would be appropriate, but the EPA has not made the case for their complete exclusion.

Response: See the preamble for the response on selection of the threshold. Also, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6. Note that this rule does not impose permitting requirements on sources, thus comments regarding streamlining permitting requirements are not on point.

Commenter Name: David Fairfield
Commenter Affiliation: National Grain and Feed Association (NGFA)
Document Control Number: EPA-HQ-OAR-2008-0508-0463.1
Comment Excerpt Number: 2

Comment: The NGFA believes there are no circumstances that would warrant EPA to consider lowering its proposed reporting threshold to the alternate levels previously evaluated by the agency of 1,000 metric tons CO_2e per year or 10,000 metric tons CO_2e per year. As indicated by EPA's cost-effectiveness analysis, such lower reporting thresholds would dramatically increase the number of facilities which would be affected by the reporting burden, but such levels would provide almost no increase in the total anticipated GHG emissions that would be reported. In contrast, the NGFA recommends that EPA raise the reporting threshold to 100,000 metric tons CO_2e per year, rather than the proposed 25,000 metric tons CO_2e per year. According to Table VIII-2 of the proposed rule, increasing the reporting threshold would reduce estimated emission reporting by only four percent, while reducing the number of affected entities by over 50 percent. We believe this change would assist EPA in achieving its stated goals of: 1) collecting data of sufficient accuracy and quality to be used to inform future climate policy development; and 2) reducing the reporting burden, when feasible.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: [name not given]
Commenter Affiliation: Graphic Arts Coalition (GAC)
Document Control Number: EPA-HQ-OAR-2008-0508-0701.1
Comment Excerpt Number: 3

Comment: Based on EPA's information on emission coverage of downstream sources, it is apparent that emissions from most industrial facilities are relatively small compared to the very large sources of emissions, e.g. power plants. Thus, establishing a reporting threshold is critical to developing a meaningful data set, without unduly burdening smaller industrial facilities. EPA has estimated the first year costs at the 1,000 t CO_2e threshold to be $434 million, as opposed to $109 million at the 100,000 t CO_2e threshold – a difference of $325 million, which the GAC's sees as a significant cost increase and financial burden for the majority of graphic art facilities. Based on EPA's Proposed Mandatory GHG Reporting Rule Overview Presentation the Proposed Rule covers approximately 54.9% of the emissions for downstream sources via the proposed 25,000 t CO_2e threshold (approximately 13,205 facilities). However, EPA covers approximately 52.4% of the emissions for sources via a 100,000 t CO_2e threshold (approximately 6,598 facilities) – only a 3% decrease in the collection of emissions data. It is premature to set a 25,000 t CO_2e threshold because EPA did not analyze thresholds between 25,000 and 100,000 t CO_2e. Based on EPA's analysis, the 25,000 t CO_2e threshold is the minimum it should be set at – given the fact that facilities below 25,000 t CO_2e are not significant sources, which is the primary target of the rule. And, given the large gap in EPA's analysis (between 25,000 and 100,000 t CO_2e), it is more than likely that the correct threshold is somewhere in-between these two numbers. Thus, EPA should set the threshold at 100,000 t CO_2e, relieving a considerable amount of facilities from the burden of this rulemaking, while preserving emissions data to within 3% of the Proposed Rule's 25,000 t CO_2e threshold.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Kathy G. Beckett
Commenter Affiliation: West Virginia Chamber of Commerce
Document Control Number: EPA-HQ-OAR-2008-0508-0956.1
Comment Excerpt Number: 3

Comment: EPA proposes in the preamble a reporting threshold of 25,000 metric tons of CO_2 equivalent (mt CO_2e). 74 Fed. Reg. 16467/3. Although EPA considered alternative emissions thresholds (1,000, 10,000 and 100,000), it is unclear why emissions thresholds in the 25,000 – 100,000 mt CO_2e range were not considered. The Chamber supports EPA's stated objective of minimizing the reporting burdens on impacted entities while capturing a maximized percentage of emissions data. Id. It is recommended that EPA analyze emissions thresholds above 25,000 mt CO_2e. Comments submitted by the National Association of Manufacturers (NAM) indicate that by raising the threshold to 100,000 mt CO_2e, EPA could drastically reduce the number of impacted manufacturers from approximately 13,000 reporters to approximately 6,500 reporters, while still capturing more than 82 percent of estimated GHG emissions. This information demonstrates that EPA's stated goals of maximizing emissions reporting while excluding small emitters, and reducing the compliance burdens on impacted entities, can be fully achieved at threshold levels higher than what is currently proposed. The currently proposed threshold will result in tremendous paperwork burdens on regulated entities, and associated administrative burdens on EPA itself. The unnecessary data that will be produced if the proposed threshold is maintained will do little to further EPA's environmental policy objectives. EPA should further analyze emissions thresholds above the proposed 25,000 mt CO_2e.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Susan J. Miller
Commenter Affiliation: The Brick Industry Association
Document Control Number: EPA-HQ-OAR-2008-0508-0478.1
Comment Excerpt Number: 1

Comment: Increase the reporting threshold from 25,000 tons of CO_2 equivalent (t CO_2e) and analyze data on a threshold gap ranging from 25,000 to 100,000 t CO_2e.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Melvin E. Keener
Commenter Affiliation: Coalition for Responsible Waste Incineration (CRWI)
Document Control Number: EPA-HQ-OAR-2008-0508-0446.1
Comment Excerpt Number: 4

Comment: CRWI is concerned with the 25,000 metric tons reporting threshold. EPA justifies this based, on the idea that a number of industry expressing "support:for a 25,000 metric ton of CO_2e threshold because it sufficiently captures the majority of GHG emissions in the U.S., while excluding smaller facilities and sources." (see 74 Fed. Reg. at 16467). However, this is not a universal position for industry. The American Chemistry Council specifically suggested using 100,000 metric tons because it would capture greater than 90 percent of the carbon dioxide equivalent from the chemical industry. CRWI also suggests that the initial reporting threshold

should be set at 100,000 metric tons carbon dioxide equivalents primarily because this would be consistent with the requirements of the European Union Emissions Trading Scheme for general industrial sources and Canada's mandatory reporting rules. At a later, date, EPA could lower the reporting threshold and evaluate how much additional information is obtained. Starting with 100,000 metric ton threshold would allow EPA to include most of the major sources of greenhouse gas emissions while learning how to gather and process the data., EPA could continue lowering the threshold, add smaller sources at a controlled pace, until becoming convinced additional data is not needed.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 4 regarding the suggestion on phasing in a lower threshold.

Commenter Name: James B. Martin
Commenter Affiliation: Colorado Department of Public Health and Environment
Document Control Number: EPA-HQ-OAR-2008-0508-0554.1
Comment Excerpt Number: 1

Comment: Colorado supports the 25,000 tons per year (TPY) carbon dioxide equivalent (CO_2e) greenhouse gas (GHG) threshold proposed by EPA. This threshold will capture the vast majority of GHG emissions by imposing a reporting obligation on a modest number of sources nationwide. If EPA were to establish a threshold lower than 25,000 TPY CO_2e, an inordinate number of small sources would be captured in the reporting regime, resulting in an unnecessary fiscal burden for industry with little yield in GHG information. Colorado recommends that EPA include an additional threshold of 7,000 TPY CO_2e for each point source. This two-tier threshold approach avoids imposing burdensome reporting mandates on small point sources, such as space heaters, and reduces the complexity of EPA's reporting program and data management. It is key to note this additional threshold would be used to eliminate the requirement to report de minimis point sources, but it would not supplant the 25,000 TPY CO_2e threshold. If this point source threshold is established, EPA should periodically review the threshold to ensure it is appropriate and consistent with the policy intent. Proposed language follows: Only sources that fall under both of the following thresholds will be required to report their direct facility CO_2e emissions to EPA: * Emit 25,000 tons per year (tpy) CO_2e or more facility-wide, and * Emit 7,000 tpy CO_2e or more on a point basis. Examples: * A facility with four boilers that emit 7,000 tpy/point CO_2e (or more), respectively, would need to report emissions — both the 25,000 tpy/facility and 7,000 tpy/point CO_2e thresholds would be met. * A facility with three boilers that emit 7,000 tpy/point CO_2e (or more), respectively, would not need to report emissions – only the 7,000 tpy/point CO_2e would be met, but not the 25,000 tpy/facility threshold. * A facility that emits more than 25,000 tpy CO_2e, but does not have a single point emitting at least 7,000 tpy CO_2e would not need to report emissions – only the 25,000 tpy/facility CO_2e would be met, but not the 7,000 tpy/point threshold.

Response: See the preamble for the response on selection of the threshold. EPA has determined that a facility-level threshold is appropriate for achieving the goals of this reporting rule. In the first and third examples given by the commenter, both facilities would emit more than 25,000 metric tons, but only one of them would be required to report. This would result in collection of an incomplete dataset that is less useful for analyzing potential policies and developing programs. See the preamble response for the need for a uniform facility thresholds. In addition,

including both a facility threshold and a threshold for individual emission points within a facility would add complexity to the rule.

Commenter Name: Andrew Ginsburg
Commenter Affiliation: Oregon Department of Environmental Quality
Document Control Number: EPA-HQ-OAR-2008-0508-1463
Comment Excerpt Number: 5

Comment: We urge EPA to reconsider its recommendation on a reporting threshold. We agree with the WCI's comments that requiring reporting for sources under the 25,000 mt CO_2e threshold (WCI recommends a reporting threshold of 10,000 mt CO_2e) would better support the integrity of future regulatory programs such as cap and trade. While we understand that EPA does not wish to place an undue burden on smaller sources, a lower threshold would also provide helpful information as states craft complementary policies to a federal cap and trade program. Oregon chose to set a threshold of 2,500 mt CO_2e for its state GHG reporting rule to get a more complete picture of Oregon's GHG emissions.

Response: See the preamble for the response on selection of the threshold. Also, as explained in the preamble, this reporting rule does not preempt or replace State rules, and States are free to collect additional information under State rules and programs.

Commenter Name: John L. Wittenborn et al.
Commenter Affiliation: Steel Manufacturers Association (SMA) and Specialty Steel Industry of North America (SSINA)
Document Control Number: EPA-HQ-OAR-2008-0508-0518.1
Comment Excerpt Number: 1

Comment: SMA/SSINA support increasing the reporting threshold from 25,000 to 100,000 metric tons of CO_2e annually. Such a threshold still would account for the vast majority of iron and steel sector emissions (99.8% at 25,000 MT vs. 99.2% at 100,000), yet would greatly decrease regulatory burdens at small facilities that are least equipped to handle increased recordkeeping and reporting obligations. As steel emissions account for only roughly 1% of national GHG emissions, the increased burden of capturing an additional 0.6% of this 1% are difficult to justify given the considerable costs to smaller facilities and the proposal's omission of relatively significant emitters from any reporting at all.

Response: See the preamble for the response on selection of the threshold. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses.

Commenter Name: Eric Holdsworth
Commenter Affiliation: Edison Electric Institute
Document Control Number: EPA-HQ-OAR-2008-0508-0212c
Comment Excerpt Number: 2

Comment: We do support, also, the 25,000-ton threshold established in the Reporting Rule. We think that is comparable to the 25-megawatt threshold that we currently face, though, of course, it is a bit different and could expand somewhat the reach of the program and the efforts required.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Brian Jones
Commenter Affiliation: Clean Energy Group (CEG), M.J. Bradley & Associates, LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0212e
Comment Excerpt Number: 1

Comment: CEG generally agrees with the proposed approach EPA has taken with regards to the 25,000-metric-ton emissions reporting threshold and the comprehensive nature of the source category coverage.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: See Table 7
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0459.1
Comment Excerpt Number: 1

Comment: The 25,000 metric tons per year threshold is appropriate. Anadarko supports using EPA's proposed 25,000 metric ton per year threshold to determine which facilities will be subject to the reporting rule. Anadarko agrees with EPA's assessment that implementing a 10,000 metric ton per year threshold would greatly expand the number of sources regulated by the rule placing an undue burden and cost on industry without an appreciable return on the information obtained.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Lindsay Moseley
Commenter Affiliation: Sierra Club
Document Control Number: EPA-HQ-OAR-2008-0508-0212t
Comment Excerpt Number: 1

Comment: As outlined in the Proposed Rule, the reporting threshold, we believe it strikes the right balance between comprehensive data collection and easing burdens on small sources. Generally, only facilities emitting greenhouse gases equivalent to 25,000 metric tons of CO_2 per year are required to report. This balance helps to keep compliance cost low, while requiring reports from only about 13,205 entities. This Proposed Rule would capture 85 to 90 percent of U.S. emissions. Raising the registry limit would, as EPA rightly points out, result in a piecemeal and unhelpful portrait of emissions, exempting some large emitters in a given industry while capturing others. Lowering the threshold too much, on the other hand, would increase cost without substantially improving data quality.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Wesley L. McNealy
Commenter Affiliation: Pepco Holdings, Inc. (PHI)
Document Control Number: EPA-HQ-OAR-2008-0508-0547.1
Comment Excerpt Number: 3

Comment: PHI supports the 25,000 ton CO_2e facility-based threshold established in the proposed rule, as long as presently exempted de minimis sources remain exempt and are not required to be included in future facility threshold calculations. Any proposal to include presently exempted sources would add a significant administrative tracking and reporting requirements for de minimis sources with little environmental benefit. In addition, given the linear nature of electric utility infrastructure (such as electric transmission and distribution lines, and gas transmission and distribution pipelines, covering thousands of miles), PHI asserts that de minimis sources located along this infrastructure should be exempt from reporting requirements. A facility (as defined in proposed §98.6) based threshold strikes an appropriate balance between administrative costs to regulated entities and the compilation of useful information for the Agency.

Response: See the preamble for the response on selection of the threshold. Also see the preamble section and comment response document on de minimis reporting.

Commenter Name: Larry R. Soward
Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)
Document Control Number: EPA-HQ-OAR-2008-0508-0619
Comment Excerpt Number: 15

Comment: The EPA requested comment on how considerations of actual and potential emissions should be incorporated into the proposed threshold. The potential for a facility to emit GHGs from a source category above that category's threshold should determine which facilities are subject to the reporting requirements, but the GHG reporting should be based on actual emissions. In other words, the potential GHG emissions vis-à-vis the threshold values should determine which facilities are subject to the program, while the data reporting requirements should be based on actual emissions, or, where applicable, the EPA's proposed emission estimation methods. Even though a threshold based on potential emissions will likely involve more reporters at the outset, at least a couple of positive aspects likely follow from this approach. First, it will reflect the "worse-case" scenario and thus provide more meaningful data usable in planning future strategies to address GHG emissions. Secondly, it will offer encouragement to facilities to get their potential and/or permitted GHG emissions more in line with their actual emissions if they do not want to remain under the reporting requirements. In doing this "truing-up", emission inventories will more accurately reflect real emission levels. Texas has already learned from its experiences in the ozone SIP processes that inaccurate or skewed emission inventory numbers can adversely affect policy decisions and control strategies. However, the EPA should develop a protocol to allow facilities subject to the reporting requirements due solely to exceeding the pertinent threshold based on their potential to emit and whose reported actual emissions do not exceed the pertinent threshold to exit the reporting requirements of the rule.

Response: The final rule retains the reporting threshold based on actual emissions (with the exception of emissions from municipal solid waste landfills). An actual emission metric accounts

for actual operating practices at each facility. A threshold based on potential emissions would bring in far more facilities including many small emitters. For example, under a potential emissions threshold, a facility that operates one shift a day would have to estimate emissions assuming three shifts per day, and would have to assume continuous use of feedstocks or fuels that result in the highest rate of GHG emissions absent enforceable limitations. Such an approach would be inconsistent with the twin goals of collecting accurate data on actual GHG emissions to the atmosphere and excluding small emitters from the rule to reduce the monitoring, recordkeeping, and reporting burden. The majority of public commenters favored thresholds based on actual emissions for these reasons, and some commenters also pointed out that the calculation of potential emissions for other programs can be quite complex. The increased complexity of using potential emissions as a threshold and the increased cost and economic burden of requiring reporting by additional small sources are not warranted given that the goal of the reporting rule it to gain information on actual GHG emissions.

Commenter Name: See Table 12
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0480.1
Comment Excerpt Number: 11

Comment: EPA correctly determined that parties should report actual emissions, even if estimated, as opposed to potential emissions. A reporting system based on potential-to-emit would dramatically overstate GHG emissions, and provide misleading information to EPA, Congress and others who may rely on this data concerning the most significant sources of emissions and important trends in emission patterns.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Stewart T. Leeth
Commenter Affiliation: Smithfield Foods, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0553.1
Comment Excerpt Number: 2

Comment: Smithfield agrees with EPA's proposal to require reporting of estimated actual emissions rather than on a capacity-based potential-to-emit basis (74 Fed. Reg. at 16,463). Information regarding actual emissions will provide more accurate emissions data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: See Table 13
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0395.1
Comment Excerpt Number: 10

Comment: EPA is soliciting comments on how considerations of actual and potential emissions should be incorporated into the proposed threshold. We encourage EPA to maintain a focus on actual emissions estimates and not require facilities to calculate and report GHG emissions estimates based on a potential to emit. Potential emissions calculations would be extremely time

consuming and expensive and would produce speculative results that would provide little useful, or worse, inaccurate information. Potential emissions are not relevant to climate change. Only actual emissions may be relevant. We believe that the methodologies outlined in the proposed rule allow facilities to enter site-specific and actual data to make an annual estimate of GHG emissions. We recommend EPA retain the approach outlined in the proposed rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: See Table 13
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0425.1
Comment Excerpt Number: 2

Comment: In Section IV.C of the Preamble, EPA requested comments on how considerations of actual and potential emissions should be incorporated into the proposed threshold. CIA encourages EPA to maintain a focus on actual emissions estimates and not require facilities to calculate and report GHG emissions estimates based on a potential to emit. Potential emissions calculations would produce speculative results that would provide little useful, or worse, inaccurate information and are not relevant to climate change. Only actual emissions may be relevant. We believe that the methodologies outlined in the proposed rule should allow facilities to enter site specific and actual data to make an annual estimate of GHG emissions. If EPA insists on requiring reporting from livestock facilities, we recommend EPA retain the approach outlined in the proposed rule regarding the use of actual GHG emissions rather than the potential to emit.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: William D. Schrand
Commenter Affiliation: Southwest Gas Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0417.1
Comment Excerpt Number: 2

Comment: The 25,000 ton per year (tpy) emissions threshold for reporting greenhouse gas (GHG) emissions from affected facilities is consistent with the approach taken in California and the Western Climate Initiative (WCI). It will ensure that significant GHG emitters will report, while avoiding unnecessary burdens on smaller facilities. All of the facilities that would trigger the 25,000 ton threshold should have existing air quality permits which require annual reporting of fuel consumption and pollutants. These reports would provide a convenient opportunity to verify which facilities exceed 25,000 of combustion emissions.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Anonymous
Commenter Affiliation: Drexel University Earle Mack College of Law
Document Control Number: EPA-HQ-OAR-2008-0508-0237.1
Comment Excerpt Number: 2

Comment: It is good that the proposed rule includes de minimis levels of reporting. The proposed rule recognizes that small sources, in reality, do not make much of a dent in the pollution problem. Since reporting is costly and burdensome for smaller sources, the benefit gained from requiring them to report is substantially outweighed.

Response: See the preamble for responses on the threshold and on de minimis reporting.

Commenter Name: John M. Batt
Commenter Affiliation: Airgas, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0408.1
Comment Excerpt Number: 2

Comment: Airgas supports an "actual emissions" threshold and does not believe that "a potential to emit" threshold should be considered. Since the important information is the actual GHG emissions to the atmosphere, an extremely conservative, confusing, and often artificial "potential to emit" threshold should not be applied. It would sweep in numerous additional facilities and create additional burdens to numerous reporters of "insignificant actual emissions" with limited benefits.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Kathleen Tobin
Commenter Affiliation: Verizon Communications, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0575.1
Comment Excerpt Number: 2

Comment: THE 25,000 METRIC TON THRESHOLD SPECIFIED IN THE RULE HELPS ASSURE THAT THE RULE WILL BE COST EFFECTIVE. Verizon supports the proposed 25,000 metric ton reporting threshold. Based on the EPA's preliminary study, this threshold would capture the majority of GHG emissions. If the threshold was lowered to 10,000 metric tons, only an additional 1% of greenhouse gas would be captured. Such a small benefit would be greatly outweighed by the additional burdens that would be placed on the regulated community.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Carol E. Whitman
Commenter Affiliation: National Rural Electric Cooperative Association (NRECA)
Document Control Number: EPA-HQ-OAR-2008-0508-0483.1
Comment Excerpt Number: 2

Comment: In §98.2, EPA proposes a minimum reporting threshold of 25,000 metric tons CO_2e. The thresholds applying to electricity generation units and to electric power systems are our primary interest. This threshold strikes a good balance between comprehensive coverage and the cost of reporting. Lowering the threshold would capture a large number of very small facilities. This could impose burdensome costs on the small entities, including many of our cooperative members. To provide some perspective, there are currently 930 cooperatives in the U.S. with a median number of customers per cooperative of 12,500. Lowering the threshold also would

increase the number of reports that EPA would have to process and review. As a result, we urge EPA to maintain the existing 25,000 metric ton threshold in the final regulations for electricity generation and the transmission and distribution equivalent of 17,820 pounds of nameplate capacity for SF_6.

Response: For the discussion on threshold, see the preamble for the response on selection of the threshold. With respect to SF_6, EPA is not going final with the SF_6 from electrical equipment subpart at this time. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Thomas Siegrist
Commenter Affiliation: Koch Nitrogen Company LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0351.1
Comment Excerpt Number: 28

Comment: EPA has solicited comment on how considerations of actual and potential emissions should be incorporated into reporting thresholds under the Proposed Rule. Development of responsible public policy, as well as any potential regulatory programs that may result, must be based upon an accurate assessment of emissions made to the atmosphere. Actual emissions — not potential emissions — are the measure of concern, since the effects of actual emissions are the intended focus of the reporting proposal. EPA should continue to define reporting thresholds based on actual emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: J. Southerland
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0165
Comment Excerpt Number: 20

Comment: It would be wise to first approach the larger Title V and Synthetic Minor facilities under the EPA air programs to get a bit smaller population, but yet the most sophisticated and larger facilities. They are already used to frequent reporting complicated information and frequently have internal environmental staff to accomplish the required feats. Most smaller (minor/permitted) facilities either do not already report or do not report as frequently as the larger facilities and normally do not have internal staffs; thus must rely on external consultants at a significant economic impact. Many of these facilities are at the cusp of economic failure and may have extreme impact from the added expense. Both facilities and air agencies who are most likely to be involved in GHG registration and reporting are familiar with the related concepts and procedures and are already in an established communication chain. Keep talking to them in the same language they already use and understand. In the current "Geico vernacular," the processes should be so simple that even a caveman can do it.

Response: See the preamble for the response on selection of the threshold. Regarding reporting by only Title V sources, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6.

Commenter Name: Keith Adams
Commenter Affiliation: Air Products and Chemicals, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-1142.1
Comment Excerpt Number: 1

Comment: Air Products supports a reporting threshold no lower than 25,000 metric tonnes CO_2-e. The potential 1% increase in emissions covered by lowering the threshold to 10,000 metric tonnes would not bring value commensurate with the costs imposed on such smaller sources of GHG emissions.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Stephanie Castorina
Commenter Affiliation: Association Connecting Electronics Industries (IPC)
Document Control Number: EPA-HQ-OAR-2008-0508-0545
Comment Excerpt Number: 1

Comment: In general, IPC supports the EPA's decision to focus on the large, direct sources of greenhouse gases by setting the reporting threshold at 25,000 tons per year. IPC believes that the proposed threshold is appropriate for EPA to gather adequate data for future use and should not be lowered. IPC's membership is primarily made up of small and medium-sized businesses. A lower threshold would bring a number of these businesses into the scope of the rule and require them to report their emissions, which would be an administrative and costly burden.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: See Table 9
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0412.1
Comment Excerpt Number: 5

Comment: GPA supports using EPA's proposed 25,000 mtpy emissions threshold to determine which sources will be subject to the inventory rule. GPA agrees with EPA's assessment that implementing a 10,000 mtpy threshold would inappropriately expand the number of sources regulated by the rule.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: John M. Batt
Commenter Affiliation: Airgas, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0408.1
Comment Excerpt Number: 1

Comment: Airgas supports the selection of a 25,000 metric ton of CO_2 equivalent /year facility source applicability threshold for Greenhouse Gas (GHG) Mandatory Reporting. This threshold is already being used or is being considered for a number of GHG mandatory reporting programs in the United States. The information provided by EPA in the preamble, demonstrates this

threshold level provides a good balance by maximizing the amount of GHG emissions being reported while avoiding /minimizing the reporting burden on smaller emitters. The potential one percent increase in emissions coverage by reducing the threshold to 10,000 metric tons/year (as determined by EPA) would be of limited value and would result in significant cost burdens to approximately 12,000 relatively insignificant facilities. We believe it is important that this threshold is kept consistent and that it applies for all existing and all future facilities.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Kathleen M. Sgamma
Commenter Affiliation: Independent Petroleum Association of Mountain States (IPAMS)
Document Control Number: EPA-HQ-OAR-2008-0508-0521.1
Comment Excerpt Number: 5

Comment: The threshold for reporting should be based on actual releases of greenhouse gases into the atmosphere.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Christian Richter
Commenter Affiliation: US Poultry & Egg Association, National Turkey Federation & National Chicken Council
Document Control Number: EPA-HQ-OAR-2008-0508-0577
Comment Excerpt Number: 1

Comment: The Agency's proposed framework would require annual monitoring and reporting from a range of facilities that emit greenhouse gases above certain levels. We agree with EPA's rationale in establishing a facility reporting threshold of 25,000 metric tons. EPA has rightly determined that this threshold "sufficiently captures a majority of the GHG emissions in the U.S., while excluding smaller facilities and sources" (68 FR 16467). We support a reporting system that avoids significant administrative and cost burdens on small sources as well as the Agency.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Jerry Call
Commenter Affiliation: American Foundry Society (AFS)
Document Control Number: EPA-HQ-OAR-2008-0508-0356.2
Comment Excerpt Number: 6

Comment: AFS agrees that any reporting thresholds should be based on actual emissions for those facilities that do not contain any of the listed source categories as EPA proposed, as opposed to potential to emit GHG or GHG emissions capacity.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Kevin Fay
Commenter Affiliation: International Climate Change Partnership (ICCP)
Document Control Number: EPA-HQ-OAR-2008-0508-0490.1
Comment Excerpt Number: 9

Comment: ICCP generally agrees with the threshold level of "25,000 metric tons of CO_2e per year of actual emissions." This level appears to strike the right balance between number of facilities covered, and comprehensiveness of the reporting overall.

Response: See the preamble for the response on selection of the threshold. Regarding actual emissions, see the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: See Table 7
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0367.1
Comment Excerpt Number: 3

Comment: AXPC supports EPA's proposal to set the reporting threshold for a facility at 25,000 metric tons CO_2e annually, and believes EPA set out a reasoned argument for making that choice; i.e., that using an annual 10,000 metric ton CO_2e threshold would double the number of facilities required to report while only adding 1% to the 85%-90% of greenhouse gas (GHG) emissions captured using the higher threshold.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Rasma I. Zvaners
Commenter Affiliation: American Bakers Association (ABA)
Document Control Number: EPA-HQ-OAR-2008-0508-0497.1
Comment Excerpt Number: 10

Comment: EPA's Mandatory Greenhouse Gases Reporting proposal states that the scope of the proposed emission threshold is based on actual emissions "from all the applicable source categories located within the physical boundary of a facility." 74 FR 16460. ABA supports an approach where the affected source would estimate its total actual emissions using EPA's reference methods, or if it is a small facility with stationary combustion equipment under a certain rating, it could use a mass balance approach as proposed. ABA agrees with the Agency's finding that using potential emissions for this proposed rule is inappropriate and would create reporting challenges for many smaller sources, including bakeries. For example, some bakers may only produce one type of product several months of the year (e.g., graduation cakes, holiday pies) or when a customer asks for a particular shipment. These customer requests and consumer demands may result in shift changes similar to the example provided in EPA's preamble discussion. [Footnote:"[U]nder a potential emissions threshold, a facility that operates one shift a day would have to estimate emissions assuming three shifts per day, and would have to assume continuous use of feedstocks or fuels that result in the highest rate of greenhouse gas emissions absent enforceable limitations. Such an approach would be inconsistent with the twin goals of collecting accurate data on actual greenhouse gas emissions . . . and excluding small emitters from the rule." 74 FR 16469] Moreover, the inflexible approach of using potential emissions

would also discourage voluntary emissions reductions, as there would be no advantage to limiting actual emissions below the 25,000 ton per year threshold (or other applicable threshold).

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Steven D. Meyers
Commenter Affiliation: General Electric Company (GE)
Document Control Number: EPA-HQ-OAR-2008-0508-0532.1
Comment Excerpt Number: 3

Comment: GE agrees with the proposal to set Mandatory Program reporting thresholds based on a general emissions level of 25,000 metric tons of direct emissions. This level will be sufficiently high to promote cost effective reporting and sufficiently low to allow collection of a high percentage of emissions. A lower threshold would significantly increase the number of reporting facilities and only marginally increase the quantity of emissions reported.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Barbara A. Walz
Commenter Affiliation: Tri-State Generation and Transmission Association, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0495.1
Comment Excerpt Number: 2

Comment: In §98.2, EPA proposes a minimum reporting threshold of 25,000 metric tons CO_2e. This threshold strikes a good balance between comprehensive coverage and the cost of reporting. Tri-State urges EPA to maintain the existing 25,000 metric ton threshold in the final regulations.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Ram K. Singhal
Commenter Affiliation: Rubber Manufacturers Association (RMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0600
Comment Excerpt Number: 4

Comment: EPA solicits comment on page 16469 of the Notice regarding whether reporting should be based on "actual" or "potential" or "allowable" emissions, a topic that confuses compliance with other CAA programs. EPA submits that it is imperative that the Agency leave no ambiguity in this rule regarding which emissions are to be reported. EPA should clarify that reporting obligations are triggered on the basis of "actual emissions" and that annual reporting requirements also are always based on "actual emissions." This is far easier for facilities to calculate, and importantly reflects actual contributions to climate conditions. Using potential or allowable emissions as the basis for GHG reporting would be misleading and also would be difficult to calculate. Moreover, using "potential" or "permit allowable" as the basis of reporting will skew future efforts to reduce GHGs. Lastly, recordkeeping on the basis of actual emissions in contrast to reporting based on potential emissions does not penalize companies that may eventually be taxed on GHGs they report. (This comment should not be read to imply that EPA's members believe that GHG reporting is an applicable Title V requirement, because we do not

believe that Title V fees are applicable to GHG and that Title V is not applicable to GHGs, based on the December 18 2008 Memorandum from EPA's Administrator, entitled "'EPA's Interpretation of Regulations That Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program.' 73 Fed. Reg. 80300 (Dec. 31, 2008).

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15. For responses on the relationship between this rule and Title V and PSD, see the preamble and the comment response document on legal issues.

Commenter Name: See Table 6
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0358
Comment Excerpt Number: 4

Comment: The EPA should resist any efforts to weaken the rule by raising the emissions thresholds which trigger reporting duties.

Response: EPA thanks the commenter for their input. See the preamble for the response on selection of the threshold.

Commenter Name: Stephen E. Woock
Commenter Affiliation: Weyerhaeuser Company
Document Control Number: EPA-HQ-OAR-2008-0508-0451.1
Comment Excerpt Number: 9

Comment: Weyerhaeuser agrees with and supports EPA's 25,000 metric ton CO_2e reporting threshold. The 25,000 metric ton threshold sufficiently captures the majority of GHG emissions in the US, while effectively excluding smaller facilities and immaterial sources. The 25,000 metric ton threshold effectively targets large industrial emitters, which are responsible for approximately 90 percent of the US GHG emissions. A lower reporting threshold, such as 1,000 or 10,000 metric tons of CO_2e per year would broaden the national emissions coverage, but disproportionately increases the number of affected facilities (e.g., it increases the number of reporters by an order of magnitude in the case of a 1,000 metric tons CO_2e /yr threshold and doubles the number of reporters in the case of a 10,000 metric tons CO_2e /yr threshold –we estimate that similar increases in the number of Weyerhaeuser facilities required to report would occur). In addition, a 10,000 metric ton threshold would only improve national emissions coverage by approximately 1 percent. Therefore, the extra resources and expense incurred from gathering this data to comply with a 10,000 metric ton threshold would not align with the objectives of the program and would place an unreasonable reporting burden on smaller reporters. Therefore, the 25,000 metric ton of CO_2e reporting threshold captures the vast majority of the large GHG emitters, ensures an equitable and consistent GHG reporting approach, and aligns with other proposed and existing GHG programs, e.g. the California GHG reporting program.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Helen A. Howes
Commenter Affiliation: Exelon Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0373.1
Comment Excerpt Number: 10

Comment: Exelon supports EPA's use of 25,000 metric tons of actual CO_2 equivalent emissions as the mandatory reporting threshold for facilities not automatically included. This threshold achieves a good balance between the number of facilities reporting and the amount of greenhouse gas emissions covered under the program. The use of actual emissions rather than potential emissions is appropriate for this data collection program as future rule making should address the emissions that occur rather than those that simply might occur. Including potential emissions in the threshold would likely add a large number of facilities and create an administrative burden without adding greatly to the percentage of actual emissions data captured by the program.

Response: See the preamble for the response on selection of the threshold. Regarding actual versus potential emissions, see the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Henry Derwent
Commenter Affiliation: International Emissions Trading Association (IETA)
Document Control Number: EPA-HQ-OAR-2008-0508-0512.1
Comment Excerpt Number: 1

Comment: IETA applauds the EPA for designating a reporting threshold of 25,000 metric tons carbon dioxide equivalent (CO_2e) each year for most sectors except those with a requirement to report, whatever their GHG emissions.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Sam Chamberlain
Commenter Affiliation: Murphy Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0625
Comment Excerpt Number: 2

Comment: EPA has defined the reporting threshold in a variety of ways but it all corresponds to an annual facility wide actual emission level of 25,000 metric tonnes of CO_2e, unless otherwise specified. The draft preamble to the rule and supporting documents provide a detailed analysis of the impact of this threshold on different industry sectors, and support a conclusion that this threshold will result in covering approximately 85-90% of U.S. emissions. Even if a facility is subject to reporting there is a need for defining data accuracy or capture rate, such as 95%, in order to streamline reporting and ensure that large resources are not wasted on exceedingly small emission sources within the reporting boundaries. We have implemented, for both the 2007 and 2008 inventory a 5% de Minimus threshold. This was done to maximize time and value of resources utilized to collect and assimilate the GHG emission data. In the past we tried to maintain a 100% level of accountability for emissions and found that we were spending months and months of resources to track down emissions that were categorically not significant to the whole domain of emissions and but required a significant level of effort and very costly.

According to EPA, an attempt to lowering the threshold to 10,000 metric tonnes CO_2e would create a huge burden on reporters and regulators alike by approximately doubling the number of affected facilities, while it will lead to improving the national emissions coverage by an additional 1% only. Murphy support EPA's selection of the 25,000 metric tonnes CO_2e reporting threshold.

Response: See the preamble for the response on selection of the threshold. Also see the preamble for the response on de minimis reporting.

Commenter Name: Kris W. Flaig
Commenter Affiliation: California Wastewater Climate Change Group (CWCCG)
Document Control Number: EPA-HQ-OAR-2008-0508-1026.1
Comment Excerpt Number: 1

Comment: In the development of the proposed thresholds for reporting, the EPA considered many other options that would increase the number of reporting entities significantly while resulting in only a slight percent increase of U.S. emissions reported. One of these options included entities having a Title V permit. The Title V program requires stationary sources that emit or have the potential to emit over 100 tons per year of an air pollutant to report emissions. The CWCCG agrees with EPA's current position to NOT include the lower threshold Title V entities.

Response: EPA thanks the commenter for their input. See the preamble for the response on selection of the threshold. Regarding title V, see EPA-HQ-OAR-2008-0508-0526.1, excerpt 6.

Commenter Name: See Table 8
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0709.1
Comment Excerpt Number: 4

Comment: AGA supports the 25,000 ton per year (tpy) emissions threshold for reporting greenhouse gas (GHG) emissions from affected facilities. This is consistent with the approach taken in California and the Western Climate Initiative (WCI) and it will require significant GHG emitters to report, while avoiding unnecessary economic and resource burdens on smaller facilities. In addition, by removing smaller emitters from reporting, the rule will avoid creating a disincentive that would drive businesses to switch from efficient direct use of natural gas to electrical equipment with a larger carbon footprint, when measured from the source of that energy to its end use ("source energy").

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Steven M. Pirner
Commenter Affiliation: South Dakota Department of Environment and Natural Resources (SD DENR)
Document Control Number: EPA-HQ-OAR-2008-0508-0576
Comment Excerpt Number: 4

Comment: EPA is seeking comments on how considerations of actual and potential emissions should be incorporated into the proposed reporting threshold. SD DENR recommends the threshold for reporting be based on actual emissions. It has been our experience that actual emissions from sources are considerably less than the potential emissions. Basing the reporting threshold on potential emissions will pose an unnecessary burden on small businesses.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Calvin B. Parnell, Jr.
Commenter Affiliation: Texas A&M University et al.
Document Control Number: EPA-HQ-OAR-2008-0508-0667.1
Comment Excerpt Number: 4

Comment: EPA selected a mandatory reporting threshold of 25,000 metric tons (103 tonnes) for all sources. This threshold was justified using an economic approach. The data used to calculate the costs included many assumptions and estimates that are questionable. With the EPA's published emissions inventory (April 15, 2009), an alternative means for determining mandatory reporting thresholds is available and could provide a more logical means for determining which facilities should be required to report.

Response: See the preamble for the response on selection of the threshold. Information from the annual Inventory of U.S. GHG Emissions and Sinks was considered in performing analyses for the GHG reporting rule. However, for many source categories, the U.S. Inventory does not provide sufficient facility-level data to fully assess the impacts of various thresholds, and additional data and assumptions were used in the regulatory analyses. The analyses were documented in the technical support documents for the proposed rule. Since proposal, EPA has considered public comments and revised regulatory analyses if appropriate. For information on the overall regulatory impacts analyses, including facility and emissions coverage and cost impacts of the threshold levels EPA examined, see the Regulatory Impacts Analysis document for the final rule. For responses to specific comments on the threshold analyses methodology and assumptions for individual source categories, see the comment response documents for each individual source category and the preamble discussion of the individual source categories.

Commenter Name: See Table 12
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0480.1
Comment Excerpt Number: 3

Comment: The general emission threshold of 25,000 metric tons CO_2e per year that triggers reporting obligations achieves an appropriate balance between the scope of the Proposed Rule and its administrative cost. As EPA recognizes in the Preamble, a lower threshold would dramatically increase the burdens of the proposed requirements, while adding little to the understanding of national GHG emission patterns.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Craig Head
Commenter Affiliation: Nebraska Farm Bureau Federation (NFBF)
Document Control Number: EPA-HQ-OAR-2008-0508-0578.1
Comment Excerpt Number: 3

Comment: If such mandatory obligations for reporting are established, we encourage EPA to maintain the reporting level at the 25,000 metric tons of carbon dioxide equivalent (mt CO_2e) per year. Reduction in the reporting threshold would likely require additional, smaller livestock operations to also report, spreading additional regulatory and financial burdens on smaller livestock operations that again would account for a small segment of overall GHG emissions.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Bruce R. Byrd
Commenter Affiliation: AT & T Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0426.1
Comment Excerpt Number: 5

Comment: AT&T strongly agrees with EPA that the proper balance between obtaining relevant GHG emission information and imposing unnecessary cost on industry is at a level no lower than 25,000 tons CO_2EQ/year per facility. EPA in the proposed Reporting Rule demonstrates that a lower threshold could introduce serious negative consequences on many facilities and companies that are not significant sources of GHG emissions, without any real corresponding benefits. For instance, lowering the threshold to 10,000 tons CO_2EQ/year would encompass more than 7,500 more smaller sources, yet only cover 0.6% more of the United States' national emissions. See 74 Fed. Reg. at 16598; Proposed Mandatory GHG Reporting Rule: Overview at 12. Lowering the threshold to 1,000 tons CO_2EQ/year would be even more problematic, encompassing over 46,000 new sources, with a mere 1.1% increase in GHG emissions covered. AT&T believes a lower threshold would mean higher costs and less reliable information. A lower threshold could threaten the integrity of EPA's overall efforts to capture accurately GHG information from the leading GHG sources. Lower thresholds would begin to encompass smaller facilities less equipped to put into place the sophisticated monitoring mechanisms outlined in the proposed Reporting Rule, including the potential of capturing purely commercial buildings that have little capacity to monitor complex environmental issues and which are not the focus of possible GHG regulation. Thus, the potential information gained by a minute increase in information could be more than negatively offset by a decline in the quality of that information. At the same time, the costs imposed on these smaller facilities would be disproportionately higher than at larger facilities, and potentially increase the overall economic burden of the rule by orders of magnitude with no corresponding benefit.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: David Rich
Commenter Affiliation: World Resources Institute (WRI)
Document Control Number: EPA-HQ-OAR-2008-0508-0642.1
Comment Excerpt Number: 4

Comment: For sources not otherwise specified, WRI believes that that the reporting threshold should be no higher than 25,000 metric tons per year. A higher threshold would compromise future policy options by including too few sources that account for too small a share of total national emissions. EPA should consider phasing in a 10,000 metric ton threshold after the initial start date of the program. While EPA's analysis is compelling that the 25,000 metric ton threshold strikes the right balance between emissions coverage and the number of affected facilities, EPA should consider future policy needs that would require reporting from sources that emit between 10,000 and 25,000 metric tons CO_2e per year. In particular: 1. The Waxman-Markey "American Clean Energy and Security Act of 2009' (as approved by the US House Energy and Commerce Committee in May 2009) creates a greenhouse gas registry in section 713 that requires GHG reporting from entities that emit 10,000 metric tons CO_2e or more per year, even though the cap-and-trade program established under the bill applies to entities emitting over 25,000 metric tons CO_2e per year. The bill also gives EPA the authority to lower the threshold for coverage under the cap-and-trade program to 10,000 metric tons CO_2e per year. 2. The Western Climate Initiative and its member states (including California, which has developed its own reporting regulation) advocate for a reporting threshold of 10,000 metric tons of CO_2e per year.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 4 regarding the suggestion on phasing in a lower threshold.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-1021.1
Comment Excerpt Number: 5

Comment: In general, EEI supports the 25,000-metric ton of CO_2e threshold established in the proposed rule — as it is comparable to the ARP's 25 megaWatt threshold — and EPA's decision not to make third-party verification mandatory, particularly when utilities are already delivering "quality data" in their current reporting under the ARP.

Response: See the preamble for the responses on selection of the threshold. Regarding the comment on third party verification, see the preamble section and comment response document on the verification approach.

Commenter Name: Lisa Jacobson
Commenter Affiliation: Business Council for Sustainable Energy (BCSE)
Document Control Number: EPA-HQ-OAR-2008-0508-0632.1
Comment Excerpt Number: 1

Comment: The EPA Proposed Rule states that entities that emit 25,000 metric tons of CO_2-e per year or more are required to report their emissions. The Council strongly supports this threshold. The Council is confident that this is an acceptable threshold as it would capture the largest emitters of greenhouse gases, which, as a group, are responsible for 85 percent of total greenhouse gas emissions. A threshold at any lower amount would capture more emitting facilities, but there would be very little increase in data marginally. The Council interprets the proposed threshold as an optimal balance between the amount and quality of data collected and

the cost of implementation to be borne by industries, which are subject to the reporting requirements.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Marc J. Meteyer
Commenter Affiliation: Compressed Gas Association (CGA)
Document Control Number: EPA-HQ-OAR-2008-0508-0981.1
Comment Excerpt Number: 2

Comment: The CGA supports an "actual emissions" threshold and does not believe that "a potential to emit" threshold should be considered. Since the important information is the actual GHG emissions to the atmosphere, an extremely conservative, confusing, and often artificial "potential to emit" threshold should not be applied. This would add burdens to numerous reporters of "insignificant actual emissions" with limited benefits.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Michael Garvin
Commenter Affiliation: Pharmaceutical Research and Manufacturers of America (PhRMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0959.1
Comment Excerpt Number: 2

Comment: The first applicability trigger in the proposed rule is to determine if a facility's GHG emissions exceed 25,000 metric tons of carbon dioxide equivalents (MT COB2 BeqB)B per year. EPA is also seeking comment on whether or not this threshold should be lowered to 10,000 MT COB2 eqB or 1,000 MT COB2 Beq per year. PhRMA supports EPA's proposed threshold of 25,000 metric tons as described in the GHG proposed rules and believes that any lesser threshold would affect a large number of additional facilities that are smaller and may not necessarily have the resources to support this initiative. In regard to the two lower thresholds the Agency considered (i.e., 1,000 and 10,000 metric tons per year), we agree with the Agency's assessment that although both could broaden national emissions coverage, they may do so by disproportionately increasing the number of affected facilities (e.g., increasing the number of reporters by an order of magnitude in the case of a 1,000 metric tons CO_2e /yr threshold and doubling the number of reporters in the case of a 10,000 metric tons CO_2e /yr threshold)(74 FR 16468). In fact, with facilities of this size, it is not clear that the increase in coverage would result in "better" numbers because often such facilities may not have the technological sophistication to determine accurately their emissions, even with the use of simplified factors. Furthermore, the environmental benefit of including such facilities would likely be minimal. Therefore, it is not clear that there are any cost effective measures that could be directed at facilities in this size range, making the collection of emissions at these lower thresholds little more than an accounting exercise.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Shawne C. McGibbon
Commenter Affiliation: Small Business Administration (SBA)
Document Control Number: EPA-HQ-OAR-2008-0508-0979.1
Comment Excerpt Number: 1

Comment: EPA estimates that over 13,000 facilities will be subject to the GHG reporting rule. The rule requires covered facilities to measure their GHG emissions directly or to conduct testing/sampling to support facility-specific emission calculations. While many facilities such as power plants and cement plants may already be measuring and/or reporting their GHG emissions, many others are not. Moreover, some measurement methods specified by the GHG reporting rule, such as determining fugitive emissions from pipeline systems, are likely to be time-consuming and costly undertakings. [footnote: For example, the Interstate Natural Gas Association of America (INGAA), has informed Advocacy that conducting direct measurement of fugitive GHG emissions from thousands of gas pipeline compressor stations will result in "inordinate" costs.] Advocacy therefore appreciates EPA's efforts to tailor the GHG reporting rule to chiefly cover facilities that emit substantial annual quantities of GHGs. By virtue of the 25,000 metric ton per year CO_2e threshold, smaller facilities with low GHG emissions will be appropriately excluded from the rule's new reporting burdens. Accordingly, the proposed reporting threshold is very important in limiting the economic impact of the rule on small entities.

Response: See the preamble for the response on selection of the threshold. Regarding the reference to fugitive GHG methodologies for oil and gas pipelines, EPA is not going final with the Oil and Natural Gas Systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Geoffrey Cullen
Commenter Affiliation: Can Manufacturers Institute (CMI)
Document Control Number: EPA-HQ-OAR-2008-0508-0703.1
Comment Excerpt Number: 1

Comment: EPA is requesting comment on the threshold values that it is proposing to use to determine which facilities will be required reporting. As EPA points out, lowering the threshold below the proposed 25,000 metric tons CO_2e /yr would disproportionately increase the number of facilities required to report compared to the gains in emissions coverage. For example, EPA estimates that reducing the reporting threshold for "General Stationary Fuel Combustion Sources" from 25,000 tons to 10,000 tons would result in a small incremental gain in emissions coverage (reporting of 56% of estimated emissions versus 54%) while greatly increasing the number of reporters to 8,000 facilities from 3,000 facilities (a 166% increase). CMI agrees with EPA's conclusion that the increased reporting burden does not justify the increased gains in information. CMI, therefore, urges EPA not to lower the proposed reporting threshold for Stationary Fuel Combustion Sources.

Response: See the preamble for the response on selection of the threshold. See the preamble section and comment response document volume on subpart C for responses to specific comments on stationary fuel combustion sources.

Commenter Name: Marc J. Meteyer
Commenter Affiliation: Compressed Gas Association (CGA)
Document Control Number: EPA-HQ-OAR-2008-0508-0981.1
Comment Excerpt Number: 1

Comment: Facility Applicability Threshold The CGA supports the selection of a 25,000 metric ton of CO_2 equivalent /year facility source applicability threshold for Greenhouse Gas (GHG) Mandatory Reporting. This threshold is already being used or is being considered for a number of GHG mandatory reporting programs in the United States. The information provided by EPA in the preamble, demonstrates this threshold level provides a good balance by maximizing the amount of GHG emissions being reported while avoiding /minimizing the reporting burden on smaller emitters. The potential one percent increase in emissions coverage by reducing the threshold to 10,000 metric tons/year (as determined by EPA) would be of limited value and would result in significant cost burdens to approximately 13,000 relatively insignificant facilities. The CGA believes it is important that this threshold is kept consistent and that it applies for all existing and all future facilities.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Michael L. H. Marsh
Commenter Affiliation: Western United Dairymen
Document Control Number: EPA-HQ-OAR-2008-0508-0702.1
Comment Excerpt Number: 3

Comment: EPA asks for comment on using a generation threshold instead of the proposed emission threshold. A generation threshold would seem to severely penalize those early actors who installed GHG reduction technologies, such as methane digesters, causing a major disincentive to installing innovative emission reduction technologies in the future. Thresholds should be based on actual emissions, not on the potential to emit. To do otherwise is a significant disincentive to voluntary action.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Patrick J. Nugent
Commenter Affiliation: Texas Pipeline Association (TPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0460.1
Comment Excerpt Number: 11

Comment: TPA supports the proposed 25,000 metric ton/facility reporting threshold. As the preamble notes, such a threshold would provide up to 90 percent emissions coverage, See 74 Fed, Reg, 16467. Moreover, as the preamble also notes, lowering the threshold to 10,000 metric tonsffacility would double the number of affected facilities while only increasing emissions coverage by one percent. 74 Fed, Reg. 16468, The proposed 25,000 metric ton/facility threshold represents a fair and reasonable approach that would allow EPA to meet its goals while eliminating unnecessary burden on industry participants.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Marcelle Shoop
Commenter Affiliation: Rio Tinto Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0636.1
Comment Excerpt Number: 42

Comment: EPA solicits comment on how considerations of actual and potential emissions should be incorporated into the proposed threshold. Rio Tinto supports reporting of actual emissions. Basing reports on potential emissions would create additional levels of complication and burden, could dramatically increase the number of reporting facilities, and would not result in accurate emissions estimates.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 39

Comment: The preamble states: "We solicit comment on how considerations of actual and potential emissions should be incorporated into the proposed threshold" Marathon opposes the requirement to submit potential emissions. EPA has stated its goal is to obtain accurate GI IG emissions information. By requesting potential emissions, they will no longer receive what is actually emitted into the environment but rather what could be emitted. By estimating potential emissions, it would also create a large reporting and cost burden on facilities that would otherwise not be required to report. Also, contrary to what EPA states, actual emissions do not vary significantly unless a significant change occurs in the process of the facility. Potential emissions estimates can also be subject to much interpretation.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: See Table 10
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 21

Comment: EPA defines the reporting threshold generally as an annual facility wide actual emission level of 25,000 metric tonnes of CO_2e, unless otherwise specified. The draft preamble to the rule and supporting documents provide a detailed analysis of the impact of this threshold on different industry sectors, and support a conclusion that this threshold will result in covering approximately 85-90% of U.S. emissions. EPA states: “EPA is interested in receiving data and analyses on thresholds. In particular, we solicit comment on whether the thresholds proposed are appropriate for each source category or whether other emissions or capacity based thresholds should be applied. If suggesting alternative thresholds, please discuss whether and how they would achieve broad emissions coverage and result in a reasonable number of reporters”. (74 FR 68, page 16463) API comments API supports EPA’s selection of the 25,000 metric tonnes CO_2e reporting threshold. API recognizes that this threshold is consistent with other GHG mandatory reporting programs, including that of the State of California. Any attempt to lowering the

threshold to 10,000 metric tonnes CO_2e would create a huge burden on reporters and regulators alike by approximately doubling the number of affected facilities, while it will lead to inclusion of only an additional 1% of national emissions subject to the rule.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Kyle Pitsor
Commenter Affiliation: National Electrical Manufacturers Association (NEMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0621.1
Comment Excerpt Number: 16

Comment: The NEMA Carbon/Manufactured Graphite EHS Committee agrees with the rationale used and conclusions reached by EPA to select the 25,000 metric tons/year CO_2e as the appropriate reporting threshold for stationary fuel combustion equipment.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Keith Overcash
Commenter Affiliation: North Carolina Division of Air Quality (NCDAQ)
Document Control Number: EPA-HQ-OAR-2008-0508-0588
Comment Excerpt Number: 14

Comment: NC DAQ thinks that the reporting of actual emissions, not potential, makes the most sense; this is consistent with the current reporting system for criteria air pollutants and toxics.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: See Table 11
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0530.1
Comment Excerpt Number: 5

Comment: NGC supports EPA's proposed 25,000 tons CO_2e production per year reporting threshold, because this strikes an appropriate balance between administrative costs and the production of useful information for the Agency.

Response: See the preamble for the response on selection of the threshold

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Commenter Name: Juanita M. Bursley
Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech)
Document Control Number: EPA-HQ-OAR-2008-0508-0686.1
Comment Excerpt Number: 12

Comment: GrafTech agrees with the EPA's proposal to require facilities that emit over 25,000 metric tons/year of CO_2 equivalent to report; this level will capture the largest emitters while minimizing the reporting burden on smaller facilities.

Response: See the preamble for the response on selection of the threshold

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Commenter Name: Caroline Choi
Commenter Affiliation: Progress Energy
Document Control Number: EPA-HQ-OAR-2008-0508-0439.1
Comment Excerpt Number: 2

Comment: In general, Progress Energy supports the 25,000-ton reporting applicability threshold established in the proposed rule, because it is comparable to the 25 MW threshold under the ARP. However, it is important that EPA's basic approach to gather emissions reporting data not inadvertently draw in de minimus emissions.

Response: See the preamble for the response on selection of the threshold. Also see the preamble section and comment response document on de minimis reporting.

Commenter Name: See Table 14
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0635
Comment Excerpt Number: 9

Comment: We support the EPA's decision to choose an emissions reporting threshold no greater than 25,000 Mt CO_2e per year (and its decision to cover all facilities in a particular industry segment in some cases), as this choice results in covering approximately 85-90 percent of U.S. emissions without overly burdensome administrative requirements. We strongly agree with EPA that a higher threshold would be unacceptable. The reporting rule must provide data sufficient to support a robust emissions reduction program, which may include a GHG trading system. For such a program to operate successfully, the majority of emissions in each sector must be carefully measured on a facility-by-facility basis. As EPA rightly observes, an alternative threshold of 100,000 Mt CO_2e per year badly fails this test. It does not adequately cover some key sections of the economy and it would also oddly fragment reporting for many industries by exempting many large sources that still fall below that over-generous threshold. EPA should resist all efforts to raise its current threshold.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Kyle Pitsor
Commenter Affiliation: National Electrical Manufacturers Association (NEMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0621.1
Comment Excerpt Number: 9

Comment: The NEMA Carbon/Manufactured Graphite EHS Committee also agrees with the EPA's proposal to require facilities that emit over 25,000 metric tons/year of CO_2 equivalent to report; this level will capture the largest emitters while minimizing the reporting burden on smaller facilities.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Dan Elwell
Commenter Affiliation: Aerospace Industries Association (AIA)
Document Control Number: EPA-HQ-OAR-2008-0508-1140.1
Comment Excerpt Number: 7

Comment: The NPRM asked for comment on what emissions should be reported. AIA members believe that actual emissions are the only realistic reportable type of emission to trigger reporting obligations. Only actual emissions are readily measurable, and only these emissions meet the intent of the reporting mandate: identify the carbon impact on climate. Neither potential nor allowable emissions address this objective.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: James Sims
Commenter Affiliation: Western Business Roundtable
Document Control Number: EPA-HQ-OAR-2008-0508-1038.1
Comment Excerpt Number: 7

Comment: EPA proposes a minimum reporting threshold of 25,000 metric tons of CO_2 equivalent (mt CO_2e). Depending on their sector, size of operations, etc. various Roundtable members have different opinions on precisely what the minimum threshold for reporting should be. The Roundtable appreciates EPA's efforts to strike a careful balance between comprehensive coverage and the cost of reporting. We urge you to fully evaluate the detailed comments you are receiving from various sectors and be conscious of their sector-specific concerns as you draft this portion of the final rule.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Scott Manley
Commenter Affiliation: Wisconsin Manufacturers & Commerce (WMC)
Document Control Number: EPA-HQ-OAR-2008-0508-0728.1
Comment Excerpt Number: 6

Comment: WMC supports the approach to structure reporting requirement based upon actual emissions only. This approach is consistent with other air emission reporting protocols, and leads to the most accurate data collection process. Reporting based upon potential emissions would artificially inflate our nation's GHG emission profile, resulting in misleading and inaccurate data for policymakers and the general public. We therefore agree with EPA's assessment in the proposed rule that "A threshold based on potential emissions would bring in far more facilities including many small emitters. Such an approach would be inconsistent with the twin goals of collecting accurate data on actual GHG emissions to the atmosphere and excluding small emitters from the rule." As such, WMC supports a reporting threshold based upon actual emissions, rather than potential emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 6

Comment: El Paso supports basing the applicability thresholds on actual emissions instead of potential emissions. First, the use of potential emissions does not provide an accurate assessment of actual emission and the designing appropriate strategies, which goes against EPA's stated goals in the preamble. Secondly, the potential emissions in sectors like natural gas transmission are always an overestimate of actual emissions since equipment operates "on demand" and often operates at a fraction of the potential hours that it is capable of operating (i.e. 8760 hours). Potential emissions for certain types of equipment, mostly combustion equipment, are directly related to the equipment capacity and/or throughput and for a known equipment capacity the potential emissions can be predicted fairly accurately. However, for other types of emissions, including fugitive and vented, the emissions do not depend on the equipment capacity or throughput. In many cases, these types of emissions are not very well researched and/or representative emission factors do not exist to establish potential emissions. Therefore, we question the need for reporting potential emissions when such reporting will only overstate the emissions and will not provide any information useful to formulating future strategies. On the other hand, counting actual emissions, which can rise and fall depending on operating and market conditions, provides both the EPA and the company with a more realistic view of the emissions and better facilitates the development of appropriate compliance and investment strategies.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15. Regarding the commenter's mention of fugitive and vented emissions from oil and natural gas systems, EPA is not going final with subpart W (Oil and Natural Gas Systems) at this time. As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart W at this time.

Commenter Name: Kim Dang
Commenter Affiliation: Kinder Morgan Energy Partners, L.P.
Document Control Number: EPA-HQ-OAR-2008-0508-0370.1
Comment Excerpt Number: 13

Comment: Kinder Morgan strongly supports the 25,000 ton CO_2-e per year emission threshold that would generally trigger reporting obligations under the Proposed Rule.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Kelly R. Carmichael
Commenter Affiliation: NiSource
Document Control Number: EPA-HQ-OAR-2008-0508-1080.2
Comment Excerpt Number: 4

Comment: The general emission threshold of 25,000 metric tons CO_2-e per year that triggers reporting obligations achieves an appropriate balance between the scope of the proposed rule and

its administrative cost. A lower reporting threshold would dramatically increase the burdens of the proposed requirements, while adding little to the accounting and understanding of national GHG emission patterns.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 7

Comment: MidAmerican believes that the thresholds are appropriate because it strikes a balance between the number of facilities reporting and the total greenhouse gas emissions covered by the proposed mandatory reporting rule. MidAmerican believes that in certain circumstances, even though the threshold emissions may be triggered by conservative estimates of emissions, reporting should not be required.

Response: See the preamble for the response on selection of the threshold. See the preamble section on determining applicability and the comment response document on Subpart A: Applicability for the response to the comment on how applicability is determined.

Commenter Name: R. Skip Horvath
Commenter Affiliation: Natural Gas Supply Association (NGSA)
Document Control Number: EPA-HQ-OAR-2008-0508-0594.1
Comment Excerpt Number: 5

Comment: NGSA supports EPA's proposed threshold of 25,000 tons of carbon dioxide equivalent (CO_2e) and believes that it captures a majority of GHG emissions released in the U.S. The threshold strikes an appropriate balance between implementation costs and the production of useful information for the Agency. Lowering the threshold level will disproportionately increase the number of covered facilities without materially improving the level of data collected. The proposed threshold is set as such that it correctly excludes facilities that have a negligible impact on total GHG emissions. By setting the emissions threshold at 25,000 tons of CO_2e, approximately 13,000 total facilities are covered, representing 8 5-90% of the total national GHG emissions. However, if the threshold is lowered to 10,000 tons of CO_2e, the total number of facilities level almost doubles while the GHG emission data increases less than one percent. Therefore, the 25,000 tons of CO_2e threshold is appropriate and meets EPA's intended goal of gathering emissions data from large sources in the United States.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Mary J. Doyle
Commenter Affiliation: BG North America, LLC (BG)
Document Control Number: EPA-HQ-OAR-2008-0508-0714.1
Comment Excerpt Number: 5

Comment: BG supports the 25,000 metric tons CO_2e threshold. As EPA acknowledges, this should capture data from the majority of emitters and avoid assessing large costs on very small emitters. For those facilities that are currently reporting under the ARP, this threshold does not represent a change.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: William A. Collins, Jr
Commenter Affiliation: Occidental Petroleum Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0452
Comment Excerpt Number: 1

Comment: Occidental does not Support Reporting GHGs on the Basis of "Potential" or "Allowable" Emissions. EPA solicits comment on page 16469 of the Notice regarding whether reporting should be based on "actual," as opposed to "potential" or "allowable," emissions. Occidental recommends that EPA clarify that reporting obligations are triggered on the basis of "actual emissions" and that annual reporting requirements also are always based on "actual emissions." Actual emissions are far easier for facilities to calculate, and reflect actual contributions to atmospheric concentrations of GHGs. Using "potential" emissions as the basis of the calculation could significantly distort future efforts to regulate GHGs, as it could result in gross over- reporting of, among other things, commercial CO_2 streams that are not emitted to the atmosphere. For instance, and as discussed further below, Occidental's use of CO_2 for EOR requires the transportation, injection and processing of significant volumes of commercial CO_2, virtually all of which is ultimately permanently stored or sequestered in geologic formations without being emitted into the atmosphere. Reporting such captured and geologically stored volumes as "emissions" is inconsistent with the common use of the term "emissions" and would incorrectly inflate the calculated total emissions of GHGs, could cause consideration or adoption of unneeded future regulation of EOR using CO_2 and could hamper further development of large-scale deployment of carbon capture and sequestration.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Susan Eckerly
Commenter Affiliation: National Federation of Independent Business (NFIB) and NFIB Small Business Legal Center
Document Control Number: EPA-HQ-OAR-2008-0508-0587.1
Comment Excerpt Number: 5

Comment: NFIB appreciates EPA's desire to "maximize emissions reporting" and, therefore, exclude "small facilities that do not contribute significantly to the overall GHG emissions." This type of risk-based analysis is particularly appropriate given the complexity of calculating and reporting emissions as proposed in this rule. Nevertheless, NFIB is extremely concerned that, despite the minimal risk small entities pose to overall GHG emissions, the current proposal will open the door to future reporting requirements with lower thresholds. It is easy to envision how EPA, through subsequent rulemakings that may result from ongoing legal challenges, will lower the reporting threshold. A lower reporting threshold would significantly impact tens of thousands of previously unregulated small entities. This foreseeable scenario raises serious concerns about

EPA's and the regulated communities' ability to cope with the long-term impact of GHG reporting requirements.

Response: See the preamble for the response on selection of the threshold. See the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 4 regarding the possibility of phasing in a lower threshold.

Commenter Name: Matthew G. Paulson
Commenter Affiliation: LLP on behalf of BCCA Appeal Group
Document Control Number: EPA-HQ-OAR-2008-0508-0649.1
Comment Excerpt Number: 7

Comment: EPA has proposed to set reporting thresholds for certain covered facilities at an annual facility-wide emission level no lower than 25,000 metric tons of carbon dioxide equivalent per year ("MT CO_2e /yr"). Any attempt to lower the threshold to, e.g., 10,000 MT CO_2e /yr, would create a substantial burden on reporters and regulators alike by approximately doubling the number of affected facilities, while providing minimal incremental benefit (i.e., additional reporting of approximately 1% of U.S. emissions, according to EPA).

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Paul L. Carpinone
Commenter Affiliation: Tampa Electric Company (TECO)
Document Control Number: EPA-HQ-OAR-2008-0508-0717.1
Comment Excerpt Number: 4

Comment: Tampa Electric supports the 25,000-ton threshold established in the draft rule.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Chris Korleski
Commenter Affiliation: State of Ohio Environmental Protection Agency
Document Control Number: EPA-HQ-OAR-2008-0508-0598.1
Comment Excerpt Number: 5

Comment: U.S EPA's proposed mandatory GHG reporting rule requires sources that emit more than 25,000 metric tons of CO_2e to report GHG emissions to U.S. EPA. According to U.S. EPA's analysis, approximately 54.9% of U.S. greenhouse gas emissions would be covered through downstream sources at 25,000 metric tons of CO_2e threshold and 30-35% of total U.S. greenhouse gas emissions would be covered via upstream sources totaling approximately 85%-90% source coverage in the U.S. economy. Compared to the proposed 25,000 metric tons of CO_2e threshold, decreasing the threshold to 10,000 metric tons of CO_2e would increase the downstream GHG emissions coverage by less than one percent while increasing the downstream reporters from 13,205 facilities to 20,765. Similarly, decreasing the threshold to 1,000 metric tons of CO_2e would increase the downstream GHG emissions coverage by 1.1% and would increase the number of covered facilities to 59,587. While lower thresholds broaden national emissions coverage, it disproportionately increases the number of affected facilities. Therefore it

is Ohio EPA's opinion that the gains in emissions coverage are not adequately balanced against the increased number of affected facilities. The proposed threshold of 25,000 metric tons of CO_2e sufficiently captures the majority of GHG emissions in the United States while keeping reporting burden to a minimum by excluding smaller emitters.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Leah Donahey
Commenter Affiliation: none
Document Control Number: EPA-HQ-OAR-2008-0508-0620.1
Comment Excerpt Number: 3

Comment: EPA should resist efforts to weaken the rule by raising the emissions thresholds.

Response: EPA thanks the commenter for their input. See the preamble for the response on selection of the threshold.

Commenter Name: Julie Ellingson
Commenter Affiliation: North Dakota Stockmen's Association (NDSA)
Document Control Number: EPA-HQ-OAR-2008-0508-0592
Comment Excerpt Number: 3

Comment: EPA is soliciting comments on how considerations of actual and potential emissions should be incorporated into the proposed threshold. We encourage EPA to maintain a focus on actual emissions estimates and not require facilities to calculate and report GHG emissions estimates based on their potential to emit. Potential emissions calculations would be extremely time-consuming and expensive and would produce speculative results that would provide little useful information or, even worse, inaccurate information. Potential emissions are not relevant to climate change. We believe that the methods outlined in the proposed rule allow facilities to enter site-specific and actual data to make an annual estimate of GHG emissions. We recommend EPA retain the approach outlined in the proposed rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Nicole McIntosh
Commenter Affiliation: Consumers Energy
Document Control Number: EPA-HQ-OAR-2008-0508-0584.1
Comment Excerpt Number: 2

Comment: As the rule is currently proposed, the EPA recommends requiring reporting at the facility-level as a general rule, with limited exceptions. For electric generating facilities, the threshold for reporting under the rule is emitting 25,000 metric tons of CO_2e or more per calendar year beginning in 2010 or being subject to the reporting requirements of the Acid Rain Program. The definition of a facility for the electric generation source is clearly defined and understood. The threshold limits are transparent and a utility can easily determine their obligations under the rule. We generally support the reporting threshold of 25,000 metric tons of CO_2e for electric generating facilities.

Response: See the preamble for the response on selection of the threshold and level of reporting. For responses to comments on the definition of EGUs, see the preamble section on Subpart D: Electricity Generation.

Commenter Name: John R. Evans
Commenter Affiliation: LyondellBasell Industries
Document Control Number: EPA-HQ-OAR-2008-0508-0718.1
Comment Excerpt Number: 2

Comment: An attempt to lowering the threshold to 10,000 metric tonnes CO_2e would create a huge burden on both reporters and regulators alike by approximately doubling the number of affected facilities.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Paul Bredwell / Christian Richter
Commenter Affiliation: US Poultry & Egg Association, National Turkey Federation & National Chicken Council
Document Control Number: EPA-HQ-OAR-2008-0508-0507.1
Comment Excerpt Number: 1

Comment: We agree with EPA's rationale in establishing a facility reporting threshold of 25,000 metric tons. EPA has rightly determined that this threshold "sufficiently captures a majority of the GHG emissions in the U.S., while excluding smaller facilities and sources" (68 FR 16467). We support a reporting system that avoids significant administrative and cost burdens on small sources as well as the Agency.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: J. Michael Kennedy
Commenter Affiliation: Florida Electric Power Coordinating Group
Document Control Number: EPA-HQ-OAR-2008-0508-0473.1
Comment Excerpt Number: 1

Comment: The proposed reporting threshold is appropriate. In general, FCG supports the 25,000-ton reporting applicability threshold established in the proposed rule, because it is comparable to the 25 MW threshold under the ARP.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Keith Epperson
Commenter Affiliation: American Feed Industry Association (AFIA)
Document Control Number: EPA-HQ-OAR-2008-0508-0399.1
Comment Excerpt Number: 2

Comment: EPA's proposed rule would establish a 25,000 metric ton CO_2e per year reporting threshold. To determine CO_2e emissions, the proposed rule would require facilities to estimate or monitor emissions of CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, and other fluorinated gases. In developing the proposed rule, EPA states that it considered other alternative thresholds, namely 1,000, 10,000 and 100,000 metric tons CO_2e per year. AFIA believes there are no circumstances that would warrant EPA to consider lowering its proposed reporting threshold to the alternate levels previously evaluated by the agency to 1,000 or 10,000 metric tons CO_2e per year. As indicated by EPA's cost-effectiveness analysis, such lower reporting thresholds would dramatically increase the number of facilities which would be affected by the reporting burden, but such levels would provide almost no increase in the total anticipated GHG emissions that would be reported. In contrast, AFIA recommends that EPA raise the reporting threshold to 100,000 metric tons CO_2e per year, rather than the proposed 25,000 metric tons CO_2e per year. According to Table VIII-2 of the proposed rule, increasing the reporting threshold would reduce emission reporting by only four percent, while reducing the number of affected entities by over 50 percent. We believe this change would assist EPA in achieving its stated goals of: 1) collecting data of sufficient accuracy and quality to be used to inform future climate policy development; 2) reduce the reporting burden, when feasible; and 3) establishing a reporting program that complements existing State and regional reporting systems.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Edward N. Saccoccia
Commenter Affiliation: Praxair Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0977.1
Comment Excerpt Number: 18

Comment: Praxair supports the selection of a 25,000 metric ton of CO_2 equivalent /year facility source applicability threshold for Greenhouse Gas (GHG) Mandatory Reporting. The potential one percent increase in emissions coverage by reducing the threshold to 10,000 metric tons/year (as determined by EPA) would be of limited value and would result in significant cost burdens to approximately 13,000 relatively insignificant facilities. It is also important that this threshold remains consistent and applies to all existing and future facilities.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 1

Comment: Arkema supports EPA's selection of a 25,000 metric tons ("mt") per year ("mtpy") actual carbon dioxide ("CO_2") equivalent ("CO_2e") calendar year reporting threshold. EPA correctly limits the reporting rule scope to substantial actual emitting facilities. The general roadmap does not burden smaller entities not having a significant impact on the national GHG emissions inventory, not burden electricity or other fuel users with reporting emissions being generated by entities that they do not control, and focuses GHG reporting on those entities having the largest GHG emissions impact. The selected reporting threshold also conforms to existing voluntary GHG reporting systems now used by many companies that would be impacted

by this proposal. EPA appropriately identified several source categories as “all-in,” where all participants in the industrial activity would be required to report GHG activities. Arkema recommends that EPA add the fluorochemical-related source categories (Subparts L, O, and OO) to the list of “all-in” source categories.

Response: See the preamble and the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2, for responses on selection of the threshold and the all-in source categories. At this time EPA is not going final with the fluorinated GHG production subpart (subpart L). As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. Regarding the other subparts specifically mentioned by the commenter, subpart O covers HCFC-22 production and HFC-23 destruction. It is an "all-in" category with regard to HCFC-22 production, and has an applicability threshold only for any HFC-23 destruction facility that is not co-located with an HCFC-22 production facility. See Section V.O of the preamble for the proposed rule (74 FR 16510, April 10, 2009) for discussion of this threshold and see the comment response document on subpart O for discussion of responses to specific comments on that subpart. Subpart OO, Suppliers of Industrial GHGs, is an "all-in" category for producers of industrial GHGs and has thresholds only for importers and exporters. See section V.OO of the preamble for the proposed rule (74 FR 16580, April 10, 2009) for discussion of this threshold and see the comment response document on subpart OO for discussion of responses to specific comments on that subpart.

Commenter Name: John S. Hayden
Commenter Affiliation: National Stone, Sand & Gravel Association (NSSGA)
Document Control Number: EPA-HQ-OAR-2008-0508-0853.1
Comment Excerpt Number: 1

Comment: The 25,000 ton threshold that EPA has proposed most closely fulfills the purposes of mandatory GHG reporting and should be adopted in the final rule.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: None
Commenter Affiliation: Vectren Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0597
Comment Excerpt Number: 5

Comment: Vectren supports the 25,000 ton per year emissions threshold for reporting greenhouse gas (GHG) emissions from affected facilities. This will ensure that significant GHG emitters will report, while avoiding unnecessary economic and resource burdens on smaller facilities.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Edward N. Saccoccia
Commenter Affiliation: Praxair Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0977.1
Comment Excerpt Number: 19

Comment: Praxair supports an "actual emissions" threshold and does not believe that "a potential to emit" threshold should be considered. This would add confusion and burdens to numerous reporters of "insignificant actual emissions" with limited benefits.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Claire Olson
Commenter Affiliation: Basin Electric Power Cooperative
Document Control Number: EPA-HQ-OAR-2008-0508-0637.1
Comment Excerpt Number: 9

Comment: In 98.2, EPA proposes a minimum reporting threshold of 25,000 metric tons CO_2e. The thresholds applying to electric generation units and to electric power systems are Basin Electric's primary interest. This threshold strikes a good balance between comprehensive coverage and the cost of reporting. Lowering the threshold would capture a large number of very small facilities. This could impose burdensome costs on the small entities, including many rural electric distribution cooperative members. To provide some perspective, there are currently 930 rural electric cooperatives in the U.S. with a median number of customers per cooperative of 12,500. Lowering the threshold also would increase the number of reports that EPA would have to process and review. As a result, Basin Electric urges EPA to maintain the existing 25,000 metric ton threshold in the final regulations.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 17

Comment: MidAmerican submits that actual emissions should be used to determine thresholds. The purpose of the proposed rule is to develop an actual emissions inventory, not a potential emissions inventory, and actual emissions represent how the equipment is being operated and most accurately reflects the GHG emissions expected from such equipment. The use of potential emissions will unnecessarily burden facilities with the inclusions of pieces of equipment with insignificant actual emissions such as emergency generators (which EPA proposes to exclude from the rule). Such an inclusion would lead to burdensome and unnecessary efforts tracking down insignificant emissions, as well as the expensive installation of CEMS on equipment such as auxiliary boilers that operate below the actual emissions thresholds proposed by EPA. Thus, for the same reasons that EPA proposes to exclude pieces of equipment with negligible operating times and emissions, such as emergency generators, EPA should maintain the proposed rule's focus on actual emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0619, excerpt 15.

Commenter Name: Larry R. Soward
Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)
Document Control Number: EPA-HQ-OAR-2008-0508-0619
Comment Excerpt Number: 10

Comment: The EPA's proposed reporting thresholds are a sound basis for the collection of GHG emission data.

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Kusai Merchant
Commenter Affiliation: Environmental Defense Fund
Document Control Number: EPA-HQ-OAR-2008-0508-0212.1h
Comment Excerpt Number: 9

Comment: We also request that EPA make a binding commitment in this rulemaking to review the applicability threshold for mandatory reporting and determine whether it should be lowered. This review should be undertaken within three years and completed within four years.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 4.

Commenter Name: Tara Ann Rabenold
Commenter Affiliation: Drexel University
Document Control Number: EPA-HQ-OAR-2008-0508-0226.1
Comment Excerpt Number: 5

Comment: Most importantly, the environment will certainly benefit if all types and sizes of industry were required to comply with the reporting requirements. Reporting should not be limited depending on a facility's geographic position, size, type, or amount of GHGs usually emitted into the atmosphere. Limiting downstream facilities that emit over "25,000 tpy of CO_2 equivalent GHG emissions or more" should eventually be changed. Any facility that emits GHGs will affect the environment and should be required to report. Each facility that emits less than the 25,000 limit will not be moniters. Though it may seem slight, if every facility that flies under the radar adds up the emitted GHGs, I am sure that it will add up to quite a lot. I understand that monitoring facilities to this extent will require a lot of research and resources; however, I would still eventually like to see the limit done away with when the implementation of this rule is better settled.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0494.1, excerpt 4 regarding the suggestion to phase in coverage of facilities emitting less than 25,000 metric tons per year. However, if the commenter is suggesting that eventually all facilities with any GHG emissions should be required to report, this would be extremely burdensome and also not practical to implement because it could require reporting by hundreds of thousands of sources, for example facilities that have even a single very small boiler, heater, or furnace.

Commenter Name: See Table 14
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0635
Comment Excerpt Number: 13

Comment: Economically disadvantaged and minority communities often experience disproportionate impacts from polluting industries and GHG emissions are generally correlated with criteria and hazardous air pollutants.[footnote: See, e.g., Alice Kaswan, Environmental Justice and Domestic Climate Change Policy, 38 ELR 10287,19299-301 (May, 2008) (Ex. 6).] Further, communities situated alongside clusters of industrial emissions sources have been shown to experience disproportionately higher exposure to environmental pollution issues such as poor air quality, pesticide drift, poor water quality because of the cumulative impacts of environmental degradation from multiple sources. Thus, there may be significant public health co-benefits from reducing GHG emissions from clustered sources whose individual emissions may fall below the proposed threshold – and particularly so in urban areas where many such clusters exist. Requiring lower emissions reporting thresholds from facilities in such industrial clusters to allow for improved monitoring and regulation could produce important co-pollutant reductions and concomitant improvements to public health. [footnote: See generally, e.g., Diane Bailey et al., NRDC, Boosting the Benefits, NRDC Issue Paper (June 2008) (Ex. 7)]. Too, it would allow EPA better to understand the effects of climate policy, including on public health, by tracking the movement of GHGs and other pollutants through a larger swath of the economy. We therefore recommend that EPA give environmental justice issues consideration in its consideration of whether to lower reporting thresholds generally, or for industries with particularly acute co-pollutant issues, during its reviews. We also urge EPA to consider and address the environmental justice implications of GHG emissions control, and to build these considerations into its monitoring and reduction programs.

Response: See the preamble for the response on selection of the threshold. EPA is concerned about environmental justice and has programs to address situations where the combined effects of multiple emission sources in the same area can affect local health and welfare (e.g., EPA's urban air toxics program and others). The purpose of this program is not require, or even encourage, reductions in GHG emission which may also result in reductions of criteria or hazardous air pollutants. Rather, it is to gather a comprehensive and accurate data set of GHG emissions to help EPA evaluate potential CAA programs to address GHG emissions and climate change. EPA will continue to consider and address environmental justice concerns as it moves forward evaluating those options.

Commenter Name: Anonymous
Commenter Affiliation: Drexel University Earle Mack College of Law
Document Control Number: EPA-HQ-OAR-2008-0508-0237.1
Comment Excerpt Number: 3

Comment: What if a geographical location has a bunch of small sources that in aggregate, add up to a significant pollution source? Then, the environmental hit may no longer be de minimis. For example, dairy farms are typically grouped in the same area, with farms stretching for miles. If all of the dairy farms are individually de minimis, but aggregately above the de minimis level, a huge portion of pollution can go virtually unaccounted for. This is a potential problem.

Response: Unlike many other pollutants, GHGs have very long atmospheric lifetimes, are well-mixed in the atmosphere, and are transported around the globe, so their contribution to global climate change is primarily national and international in scale rather than directly effecting the local population where they are emitted. Therefore, reporting based on a facility threshold, rather than considering aggregated emissions from multiple facilities in a region, is an appropriate approach for a national reporting program for GHGs. See the preamble and comment response volume on manure management for responses to specific comments on livestock farms.

Commenter Name: Marc J. Meteyer
Commenter Affiliation: Compressed Gas Association (CGA)
Document Control Number: EPA-HQ-OAR-2008-0508-0981.1
Comment Excerpt Number: 3

Comment: The CGA encourages EPA to develop simplified emissions calculation tools for emission source categories to assist potential reporters in determining their applicability. While these simplified calculation tools would provide conservatively high emission estimates (which should be highlighted by EPA), they would allow many facilities to quickly determine when the rules are not applicable. For those facilities that find themselves slightly above the thresholds using these simplified calculation tools, further analysis for each source category would be appropriate to confirm applicability.

Response: See the preamble and the comment response document on Subpart A, Applicability, for additional discussion of applicability determination and the applicability tools and guidance EPA is developing.

Commenter Name: Melissa Thrailkill
Commenter Affiliation: Center for Biological Diversity
Document Control Number: EPA-HQ-OAR-2008-0508-0430.1
Comment Excerpt Number: 4

Comment: EPA cannot set the threshold or reporting requirements based on the uncertain outcome of Congressional climate legislation. Many years of waiting to see what Congress will do to solve the nation’s greatest challenge has left us facing a do-or-die situation; a situation that calls for immediate action.

Response: EPA has issued the final reporting rule. The rule will collect GHG data for use in developing and implementing existing CAA GHG policies and programs. See the preamble for the response on selection of the threshold.

Commenter Name: Jeanne Herb
Commenter Affiliation: New Jersey Department of Environmental Protection (NJDEP)
Document Control Number: EPA-HQ-OAR-2008-0508-0834.1
Comment Excerpt Number: 8

Comment: On page 16463, USEPA expresses interested in receiving data and analyses on thresholds. In particular, USEPA solicits comments on whether the thresholds proposed are appropriate for each source category or whether other emissions or capacity based thresholds

should be applied and how they would achieve broad emissions coverage and result in a reasonable number of reporters. The NJDEP provides the following statistics on CO_2 and methane releases reported for calendar year 2007. These data show that New Jersey's approach to thresholds covers the same universe of downstream sources of greenhouse gases proposed by USEPA plus additional facilities that are already reporting environmental data to the NJDEP. - Approximately 290 facilities reported CO2 or methane * Total releases of 42,654,050 Tons CO2e/yr - Approximately 100 facilities reported releases over 25,000 tons/year * Total of 41,041,200 Tons CO2e/yr reported (96.2 % of releases) * Top 10 facilities reported releases of 26,964,475 (63.2%) - Top 20 facilities reported release of 34,423,650 (80.7%) - Approximately 190 facilities reported releases less than 25,000 tons CO2e/yr * Total of 1,612,850 Tons/yr (3.8%) * If top 10 facilities are excluded, accounts for 10.2% of the reported releases * If top 20 facilities are excluded, accounts for 19.6% of reported releases These data show that emissions per facility drop off significantly after the first 10 to 20 large facilities. USEPA's analysis of thresholds focused on four different levels: 1,000 tons/yr, 10,000 tons/yr, 25,000 tons/yr and 100,000 tons/yr. Small changes in CO2e thresholds, such as those analyzed by USEPA, can have significant impacts on the numbers of facilities required to report. Rather than attempting to pick the perfect threshold based on CO2e alone, it is more efficient and effective to require existing reporters to report greenhouse gas information.

Response: See the preamble for the response on selection of the threshold. Regarding the suggestion that only facilities reporting under other CAA programs be required to report GHG emissions, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 14

Comment: Per §98.2(a), any natural gas transmission or offshore natural gas production facility that emits greater than 25,000 tonnes per year (25k MT/year) of carbon dioxide equivalents will have to report its emissions. Also, per §98.2(a)(4)(iv), all processing plants have to report the natural gas liquids (NGL) processed at the facilities. The proposal also requires under §98.2(f) that all sources less than 25k MT/year would essentially have to ensure the emissions are less than 25k MT/year by reviewing the relevant activity data. El Paso supports the use of 25k MT/year as the threshold to balance the number of regulated facilities and coverage of the emissions. The EPA estimates that this threshold covers 85% of the emissions while covering about 13,000 facilities. Further, industry-specific details related to the threshold selection are provided in "Background Technical Support Document" related to fugitive emissions reporting from the petroleum and natural gas industry (TSD), which document was released with the proposed rule. It is evident that going to a lower threshold only increases the number of facilities dramatically while providing marginal additional information on emissions. For the natural gas segments covered by the proposal, about 130 million tonnes of emissions will be covered, which amounts to about 87% of the total emissions from about 25% of the total number of facilities. Reducing the thresholds to 10,000 tonnes per year or even 1,000 tonnes/year dramatically increases the number of facilities covered without comparable increase in coverage. This will result in increased program costs without substantial benefits.

Response: See the preamble for the response on selection of the overall reporting threshold for the rule. At this time EPA is not going final with the oil and natural gas systems subpart. As we

consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: J. P. Blackford
Commenter Affiliation: American Public Power Association (APPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0661.1
Comment Excerpt Number: 22

Comment: EPA proposes a threshold of emissions of 25,000 metric tons of CO_2e for a facility to be required to report its GHG emissions. While certainly preferable to a lower emissions threshold, APPA has concerns about the impact and requirements for smaller units to monitor their potential CO_2 emissions to see whether or not they will, in fact, be required to report. Clearly, this is an issue for only our smallest generators, but, to an extent, this is where the burden of additional man-hours and resources would be the greatest. Some of these concerns could be remedied if the proposed limit was revised to mirror those already existing for the Acid Rain program compliance (25MW) and calculated emissions for those units smaller than 25MW. The technology investment is the same regardless of the size of the unit. Smaller and older units, often used now to insure system reliability, will no longer be economically viable to operate. This step may put more delivery pressure on the grid as these units are mothballed, or result in lower reliability levels.

Response: See the preamble for the response on selection of the threshold. EPA has taken several steps to reduce the reporting burden. In response to comments, the rule has been revised provide simpler monitoring and GHG calculation methods and provide additional flexibility, where appropriate. For example, Subpart C has been revised to allow grouping or use of simpler calculation methods for more small stationary combustion units. See the preamble sections and comment response documents on the individual source category subparts for discussion of such changes. In addition, EPA is providing tools and guidance to assist facilities with determining applicability and reporting, as described in the preamble sections and comment response volumes on compliance and enforcement and applicability determination.

Commenter Name: Ushma N. Domadia
Commenter Affiliation: Drexel University Earle Mack College of Law
Document Control Number: EPA-HQ-OAR-2008-0508-0234
Comment Excerpt Number: 8

Comment: As a general matter, 25,000 metric tons of CO_2e is low enough to capture most substantial industrial facilities and power plants, but high enough not to capture individual homes or small office buildings. Monitoring emissions from the area in between, large commercial buildings, warehouses, hospitals, universities, etc., is not directly addressed. Although industry stakeholders have supported the 25,000 tons threshold, it is understood that some small emitters may fall under the rule. Obviously, small businesses with relatively low emissions don't typically have CEMS installed onsite. Even if they are subsidiaries of a larger parent company/ emitter, CEMS are too costly to anticipate being installed on an average small emitter. Therefore, the EPA should adopt a hybrid reporting policy for these small emitters so that their costs of reporting don't put them out of business. This could include a sliding scale of frequency of reporting or minimizing the list of which GHGs to report that would correlate with the range of emissions the business creates.

Response: See the preamble for the response on selection of the threshold. For the response on reporting by commercial and institutional facilities above the threshold, see the response to comment EPA-HQ-OAR-2008-0508-0423.2, excerpt 1. Also see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 47 regarding small emitters and small businesses. Regarding use of CEMS versus other source category-specific calculation methodologies, see the preamble section on the general monitoring approach and the preamble sections and comment response documents for subpart C (general stationary fuel combustion sources) and other relevant source categories.

Commenter Name: Karen S. Price
Commenter Affiliation: West Virginia Manufacturers Association (WVMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0475.1
Comment Excerpt Number: 2

Comment: EPA has proposed a number of categories under which specific sources are subject to the reporting requirements. Under section 98.1, a number of source categories are listed. These source categories are subject to the reporting requirements regardless of the amount of annual GHGs emitted. Under section 98.2, additional source categories are identified which are required to report only if they exceed the 25,000 tons per year of CO_2e. In the preamble to the proposed rule, EPA explains that the sources listed in section 98.1 are not coupled with a threshold emissions requirement because these source categories have been found, in general, to exceed the 25,000 tons per year threshold. While this may be true, the WVMA does not believe that the sources should be required to report regardless of their GHG emissions. The sources under section 98.1 should be subject to the same annual reporting thresholds as other source categories. Although, as a whole, these types of sources may be large emitters of GHGs, as stated by EPA, there may be specific sources within those categories whose emissions do not exceed 25,000 tons per year of CO_2e. Such sources should not be subject to the effort and expense involved to gather and report GHG emissions. Therefore, the WVMA requests that the source categories listed in section 98.1 should only be subject to the reporting requirements if their emissions exceed 25,000 tons per year of CO_2e.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2.

Commenter Name: Thomas Siegrist
Commenter Affiliation: Koch Nitrogen Company LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0351.1
Comment Excerpt Number: 13

Comment: The Proposed Rule should establish the general stationary combustion threshold under section 98.2(a)(3) at 50,000 metric tons of CO_2e per year and the heat input capacity-based threshold should be altered accordingly. The Proposed Rule would establish the stationary combustion reporting threshold at 25,000 metric tons per year of CO_2e. See id. at 16486. As EPA states in the preamble to the Proposed Rule, one of the purposes of the stationary combustion source category is to capture significant emitters of GHG while, at the same time, keeping the number of affected facilities manageable. KNC believes that a 50,000 metric tons of CO_2e per year threshold would provide comprehensive coverage of GHG emissions while avoiding unnecessary inclusion of relatively insignificant emitters in the inventory. As proposed,

a 25,000 metric ton per year threshold, which equates to an approximate natural gas-firing capacity of 54 mmBtu per hour, would draw many process heaters at small facilities into the rule. In contrast, a 50,000 metric ton per year threshold would decrease the total amount of emissions covered by the rule by less than 1.3 percent while significantly reducing the number of reporting facilities and associated reporting costs. If the reporting threshold is increased to 50,000 metric tons of CO_2e per year, the heat input capacity-based threshold in section 98.2(a)(3)(ii) should be adjusted to be consistent with the 50,000 metric ton threshold. KNC is not requesting a change in the source category-specific reporting threshold of 25,000 metric tons of CO_2e under section 98.2(a)(2).

Response: See the preamble for the response on selection of the threshold.

Commenter Name: Christina T. Wisdom
Commenter Affiliation: Texas Chemical Council (TCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0638.1
Comment Excerpt Number: 6

Comment: For point source emissions, TCC requests that EPA consider using only reporting thresholds as a basis for requiring submission of data under the rule. The combination approach of requiring reporting from both emitters of greenhouse gases at a specified reporting threshold and facilities that fall under source categories is confusing and unnecessarily burdensome. For example, the way that EPA has defined "petroleum product" in § 98.6 of the proposed rule, "petroleum refinery" in § 98.250(a), and the sources at a petroleum refinery "source category" in § 98.250(b) are all extremely broad and could pull into the category many smaller sources that EPA presumably did not intend to pull in. Furthermore, by including the term "redistillation" in the definitions, any facility that is not a petroleum refinery under the traditional definition of a refinery and that takes a stream of partially distilled material from a refinery and redistills it into a narrower cut of product would be considered a petroleum refinery under the proposed regulatory definition, even if the facility does not have any of the other petroleum refining processes, such as catalytic cracking, fluid coking, delayed coking, catalytic reforming, coke calcining, or asphalt blowing. To some extent, any chemical manufacturing facility of any kind that purchases its feedstock from a petroleum refinery and then redistills it to achieve its own purpose would be pulled into the petroleum refining reporting section of the rule. Accordingly, to eliminate such confusion, TCC proposes that EPA remove all references to source categories and simply base the reporting requirement on an emissions threshold.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1641, excerpt 2, regarding all-in source categories that do not have a numerical threshold. EPA reviewed the comments submitted on the definition of specific source categories, and other definitions in the rule, and has made changes to the definitions where appropriate to improve clarity and respond to comments. See the comment response documents for subpart Y (petroleum refining) for the response to comments on the definition of this source category. Also see the comment response document for subpart A definitions for responses to comments on other definitions.

Commenter Name: Jeffrey L. Clark
Commenter Affiliation: Environmental Coordinator, Teck Alaska Incorporated
Document Control Number: EPA-HQ-OAR-2008-0508-0142
Comment Excerpt Number: 3

Comment: I am opposed to the concept of “all in” proposed in these rules. If a facility emits more than 25,000 tpy in any of the categories they should report on only the category that meets the threshold. They should be exempt from all of the other minor sources just as any other facility would be that did not break the 25,000 tpy threshold. As one can see in Table VIII-2. Threshold Cost-Effectiveness Analysis, the cost of reporting the major source would be $0.03/metric ton whereas the cost of reporting the additional minor sources would be $0.11/metric ton, over three times as much. Why should any facility be required to make complicated calculation on sources that are otherwise normally estimated? At a minimum, the EPA should consider De minimis quantities for facilities that meet the major source reporting threshold for their minor GHG sources. Use the old 80/20 rule. The landfill rules in particular could be burdensome to facilities that meet the reporting threshold in a category other than landfills but operate a small landfill on their facility. Calculations of the GHG emissions from the landfill could be more cumbersome than the calculations from the primary qualifying source.

Response: To selected threshold is based on GHG emissions from all applicable source categories located within the physical boundary of a facility. To determine emissions to compare to the threshold, a facility that directly emits GHGs from any source category listed in 98.2(a)(2) would estimate total aggregated CO_2e emissions from all source categories for which emissions calculation methods are provided in 40 CFR part 98, subparts C through JJ. The use of total emissions is necessary because some facilities are comprised of multiple process units or collocated source categories that individually may not be large emitters, but that emit significant levels of GHGs collectively. Regardless of whether a facility is subject to the rule because if contains an "all-in" source category listed in 98.2(a)(1) or an emissions threshold category listed in (98.2(a)(2), the facility must report emissions from all collocated source categories for which there are methods in the rule. See the comment response document on Subpart A applicability for additional responses on rule applicability. See the preamble for the response on de minimis reporting. Regarding the mention of landfills, at this time EPA is not going final with the industrial landfills reporting requirements. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills at this time. However, please note that municipal solid waste landfills are included in the final rule.

Commenter Name: Robert Naerebout
Commenter Affiliation: Idaho Dairymen's Association, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0314.1
Comment Excerpt Number: 15

Comment: Subpart JJ proposes mandatory reporting of CH_4, and N_2O for "owners or operators" whose facilities contain "manure management systems" that emit at least 25,000 metric tons of GHGs per year in carbon dioxide equivalent (CO_2e). As discussed above, the proposed regulation does not explain why 25,000 tons, or for that matter, 1,000, 10,000 or 100,000 metric tons of anthropogenic CO_2e emissions, were utilized by EPA. (591-92).

Response: See the preamble for the response on selection of the threshold. In addition, see the preamble section and the comment response document on subpart JJ for responses to specific comments on the manure management threshold analysis.

Commenter Name: Brian Schweitzer
Commenter Affiliation: Governor, State of Montana
Document Control Number: EPA-HQ-OAR-2008-0508-0541.1
Comment Excerpt Number: 2

Comment: The reporting process must discourage gaming the system. Your proposal of a 25,000 metric ton minimum for reporting is the same as used in the Waxman-Markey bill and the WCI Design Recommendations for the minimum compliance obligation. Some market participants could attempt to evade regulation by breaking up their emissions among different paper entities. Entities with emissions at some amount under the 25,000 metric ton level should be required to report. Doing so will make this kind of gaming more difficult.

Response: EPA thanks the commenter for their input. The comment raises the concern that companies may attempt to avoid reporting by creating multiple companies on paper, thereby dividing one facility into several small ones. The definition of "facility" under Subpart A contains two clauses that address this concern. First, a facility spans "one or more contiguous or adjacent properties". This is to ensure that reporters cannot use solely a public roadway or other public right-of-way to create multiple smaller emitting facilities. Second, the clause "under common ownership or common control," prevents firms from distinguishing separate facilities solely on the basis of ownership. This clause has a long history of interpretation under other air permitting programs, including Title V of CAA and NESHAP. Facilities that are owned by multiple entities are not considered separate facilities if there is common control. To avoid circumvention under these programs, EPA reviews whether facilities that claim to be separate are really under “common control” based on a number of criteria. As such, the creation of multiple owners will not exempt reporting under this rule as long as the facilities continue to operate under common control. For a discussion of the selection of facility-level rather than corporate-level reporting, see the preamble section on the level of reporting.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 12

Comment: The agency claims that an urgent need exists to properly quantify the amount of GHG being discharged into the atmosphere in apparent deference to claims being made that carbon dioxide is influencing the climate. By supporting and proposing reporting thresholds, the agency is directly encouraging facilities to limit their size and production capacity. While this may not always hold true for a steel manufacturer other significant sources could simply parcel up their operations so that none exceed the stated threshold thereby circumventing the intended purpose for which the information is being gathered. Outsourcing of main production operations to overseas operations will also facilitate a facility being able to fall below the threshold. This leakage of jobs and emissions to other countries can only be detected, measured and hopefully avoided by having a much lower reporting threshold that would provide for a true economy wide GHG regulating rule. In order to accomplish this, the limit would have to be orders of magnitude below the proposed level. Nucor’s stance is different than the SMA and SSINA positions which support the threshold because they believe that some smaller operations or non melting operations will be able to fall below the threshold. This support is in fact therefore a validation of the claims that Nucor alleges will happen under the proposed rule. The establishment of any threshold other than one that is designed to remove residential emitters from the system will

encourage smaller less efficient facilities and the outsourcing of certain aspects of production to foreign producers.

Response: EPA performed and economic impact analyses for the rule and found that the rule is unlikely to result in significant changes in firms' production decisions or other behavioral changes. See the preamble section on economic impacts and the Regulatory Impacts Analysis document for further information. Regarding the suggestion to select a lower threshold, see the preamble response on selection of the threshold.

Commenter Name: Jack Gehring et al.
Commenter Affiliation: Caterpillar Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0499.1
Comment Excerpt Number: 12

Comment: Title V of the Clean Air Act, and voluminous federal and state permit conditions, already require defined "major" stationary sources of various emissions (hazardous air pollutants and criteria pollutants) to measure, control and report such emissions. Title V's requirements are complex, and the recordkeeping and reporting obligations are constant, costly, and burdensome. "Major source" facilities are familiar with complex regulatory requirements and have many years of experience complying with Title V regulations and permit conditions, many of which would overlap with proposed GHG emissions regulations. In the Reporting Rule, EPA proposes mandatory reporting requirements for sources at the 25,000 t CO_2e level. However, at this threshold, facilities that currently are not Title V major sources would be required to comply with a complex regulatory scheme much like Title V, in addition to their state-enforced permit conditions (and, in some cases, federal MACT requirements). Effectively, EPA's Reporting Rule proposes that non-major sources be treated, for GHG emission regulation purposes, as major sources. This would create practical problems within individual sources regarding federal versus state jurisdiction and permit coverage. More fundamentally, establishing a 25,000 t CO_2e threshold would contravene Congressional intent in the Clean Air Act to divide permitting and enforcement responsibilities between state and federal environmental agencies, with (as noted above) insignificant benefits to the accuracy and coverage of the Reporting Rule. [Footnote: As EPA itself explains in its "Plain English Guide to the Clean Air Act," "it makes sense for state and local air pollution agencies to take the lead in carrying out the Clean Air Act. They are able to develop solutions for pollution problems that require special understanding of local industries.... State, local and tribal governments also monitor air quality, inspect facilities under their jurisdictions, and enforce Clean Air Act regulations." See http://www.epa.gov/air/peg/understand.html (viewed June 8, 2009); see also Letter from U.S. EPA to William Becker (STAPPA/ALAPCO), dated Nov. 7, 1995 ("[EPA] shares with you and your member agencies the belief that Title V should be implemented by State and local agencies rather than EPA... .")(available at http://www.epa.gov/ttn/oarpg/t5/memoranda/becker.pdf). Blurring the enforcement and permitting responsibility lines among Title V "major" and GHG emission "covered" sources will confuse regulators and regulated entities alike. In fact, EPA, through this Reporting Rule alone, would create at least one new source category between and among "major" and "area" sources—something that EPA has declined to do even when requested by its own staff (see, e.g., Memorandum dated April 19, 1999 to Air Permit Program Unit, Region I, available at http://www.epa.gov/ttn/oarpg/t5/memoranda/potamis.pdf).]

Response: The commenter is not clear how establishing the general 25,000 tpy CO2e threshold in this rule would blur enforcement and permitting lines – this is a reporting rule, not an

emissions reduction program. Moreover, unlike many other pollutants, GHGs have very long atmospheric lifetimes, are well-mixed in the atmosphere, and are transported around the globe, so their contribution to global climate change is primarily national and international in scale rather than directly affecting the State or local area where they are emitted. Regarding reporting by facilities not considered major under other CAA programs, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6. For discussion and responses to comments on the role States and the relationship of this rule to other State and Federal programs, please see the preamble. Also see the preamble section and comment response document on legal issues.

Commenter Name: Robert R. Hirst
Commenter Affiliation: International Bottled Water Association (IBWA)
Document Control Number: EPA-HQ-OAR-2008-0508-1143.1
Comment Excerpt Number: 1

Comment: IBWA believes that for source categories contributing relatively insignificant amounts of GHG emissions, such as the bottled water industry (i.e., below 0.5% of nationwide CO_2e emissions), EPA should use alternative, conservative reporting thresholds that are tied to the status of a source category facility as a Title V major source rather than the capacity of particular facilities to emit GHGs. IBWA estimates that excluding non-Title V facilities from GHG reporting will not negatively affect the quality or reliability of EPA's GHG collection efforts. Even if the reporting requirements excluded every type of food processing facility, including those associated with the manufacturing and dispersal of bottled water—an overly-conservative assumption given that at least some food processing facilities fall under Title V—EPA would miss detailed emissions data only from some 0.161% of nationwide GHG emissions. Reporting under the rule of natural gas deliveries by local distribution companies would provide EPA with a separate source of data from which to calculate GHG emissions from the combustion of natural gas. Title V facilities already have the foundations in place to support the added responsibility of GHG reporting. Major sources under Title V are adapted to managing sophisticated monitoring, recordkeeping, and reporting requirements. These facilities have adopted internal QA/QC procedures, have designated representatives responsible for compliance, and are outfitted with well-qualified staff to include GHG monitoring, recordkeeping, and reporting in the normal operation of the facility.

Response: See the preamble for the response on selection of the threshold. Regarding reporting by facilities not subject to Title V, see the response to comment EPA-HQ-OAR-2008-0508-0526.1, excerpt 6. Regarding the commenter's reference to the food processing industry, at this time EPA is not going final with the food processing subpart. As we consider next steps, we will be reviewing public comments and other relevant information. Thus we are not responding to comments on food processing at this time. However, please note that if any facility (including a food processing facility) emits 25,000 metric tons CO_2e from stationary fuel combustion sources as specified in 98.2(a)(3), they are required to report GHG emissions under the final rule.

Commenter Name: William C. Herz
Commenter Affiliation: The Fertilizer Institute (TFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0952.1
Comment Excerpt Number: 55

Comment: TFI supports provisions included in the NPRM to report the quantity of electricity generated on-site. 74 Fed. Reg. at 16,472. However, the NPRM does not contain a mechanism to account for implementation of emission control technologies prior to commencing reporting of GHG emissions. TFI feels that both are important to promote implementation of emission control technologies or renewable energy source technologies prior to commencing reporting of GHG emissions. If the data generated by this rule is ultimately used to propose a cap on GHG emissions, these measures should be considered in establishing such caps or in determining emissions baselines for industries so as not to effectively penalize facilities which have already acted to lower their GHG emissions. Allowing facilities to incorporate these measures as part of their annual report will ensure a more representative cap (if implemented), will reward facilities which have been proactive in reducing emissions and will encourage facilities to implement these environmentally-beneficial technologies. Additionally, the NPRM should allow facilities engaged in emission offsets (such as geological carbon sequestration) to incorporate those offsets into its emissions report, to encourage carbon capture measures.

Response: With respect to reporting electricity generated onsite, see the comment response document for Subpart A, General Provisions Reporting Requirements. Regarding reporting of electricity purchase and renewable energy use, see the preamble section on electricity purchases. Regarding the comment on consideration of emission controls, the rule is focused on reporting of actual emissions to the atmosphere rather than emissions reductions, for reasons explained in the preamble. Some of the subparts require reporting of the destruction efficiency or emissions reductions achieved by control devices, so in some cases the effects of controls could be determined from the reported data. As discussed in the preamble, if additional data are required to implement future policies and programs, EPA can take actions to collect such additional data when the requirements of such programs are established. Regarding the request for the inclusion of offsets in the report, see the preamble section on selection of source categories to report.

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3. DE MINIMIS REPORTING

Commenter Name: Phillip McNeely
Commenter Affiliation: City of Phoenix, AZ
Document Control Number: EPA-HQ-OAR-2008-0508-0374.1
Comment Excerpt Number: 7

Comment: Facilities that met the conditions defined in section 98.2(a) are required to report emissions from all stationary sources regardless of size. To minimize the reporting and documentation burden, the rule should include a de minimus size for stationary sources that must be included in the report. For example, small food preparation ovens and other fuel burning units do not have significant emissions, and will significantly add to the data management resources required for both EPA and the regulated facility.

Response: See the preamble for the response to comments on de minimis reporting. For responses on reporting for small stationary combustion sources and actions EPA has taken to simplify reporting for small combustion units, see the General Stationary Fuel Combustion Sources section of the preamble and the comment response document volume on Subpart C: General Stationary Fuel Combustion Sources.

Commenter Name: Traylor Champion
Commenter Affiliation: Georgia-Pacific, LLC (GP)
Document Control Number: EPA-HQ-OAR-2008-0508-0380.1
Comment Excerpt Number: 3

Comment: GP believes a de minimis exclusion based on a percentage of emissions should be included in the rule. [FR 16473 (Preamble)] EPA has chosen not to include a de minimis exemption level that would allow for exclusion of emissions under a certain percentage of total emissions to reduce the overall reporting burden to facilities. EPA states its program addresses the potential burden of reporting emission for smaller sources by first establishing reporting thresholds under which no reporting is required and second by requiring emissions to be reported only for those sources where calculation methods are provided in the rule. While GP agrees with EPA that reporting of emissions should only be required for those sources with specified methods in the rule with accepted precision and accuracy, there is still a burden to reporters for various trivial emission sources. For the pulp and paper industry, these trivial sources could include landfills, wastewater treatment plants, emissions from infrequent or insignificant uses of certain fuels (including used oil in relation to other fossil fuels), emissions from makeup chemical usage, as well as the small contributions of CH_4 and N_2O emissions from the combustion of biomass fuels. Collectively, emissions from these activities (and probably others) likely represent less than 5% of emissions from a pulp and paper mill but disproportionately increase the monitoring, reporting, and recordkeeping burden to the mills. As such, GP requests inclusion of a de minimis level of 5% of facility emissions. A facility would specify the emissions and sources that are deemed de minimis in the first year of reporting by providing the calculations for that year and continue to report those sources as de minimis in future years without the need to provide calculations unless a change in operations alters the de minimis exemption for any particular source.

Response: See the preamble for the response to comments on de minimis reporting. Also see the preamble section on subpart AA, Pulp and Paper Manufacturing, for a discussion of rule changes and responses to comments on that subpart. EPA is not going final with subpart II (Wastewater Treatment) or with the reporting requirements for industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on these subparts at this time.

Commenter Name: See Table 2
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0455.1
Comment Excerpt Number: 3

Comment: Proposed § 98.2(a)(2) states that a facility that meets the 25,000 ton CO_2e threshold for certain sources of stationary fuel combustion units must report for all emissions source categories at the facility for which calculation methodologies are provided. Additionally, proposed § 98.2(a)(3) would require any facility with emissions greater than 25,000 metric tons of CO_2e and an aggregate maximum rated heat input capacity of greater than 30 mmBtu/hr to report GHG emissions from all stationary fuel combustion sources. The Class of ’85 believes that requiring the reporting of all GHG emissions from stationary fuel combustion sources at such a facility is overly burdensome. Instead, the Class of ’85 urges EPA to adopt a de minimis threshold for these affected sources, which would exempt reporting requirements for insignificant emissions of non-CO_2 GHG emissions from certain sources. The Class of ’85

suggests that EPA adopt a de minimis threshold for reporting the emissions of CH_4, N_20, HFCs, PFCs, SF6 and other fluorinated gases including nitrogen trifluoride and hydrofluorinated ethers from emission sources at facilities that are required to report GHG emissions under proposed §§ 98.2(a)(2) and 98.2(a)(3). The Group believes that a reasonable de minimis threshold would be 100 tons per year of CO_2e, which is less than one half of one percent of the 25,000 tons per year threshold for sources required to report GHG emissions under these sections. For the de minimis threshold to apply, facilities could be required to develop maximum potential to emit calculations that verify that certain sources would never generate more than the threshold de minimis emission amount.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Regarding the establishment of a 100 tons per year de minimis threshold and a potential to emit calculation, we did not revise the final rule because we determined that this would be burdensome, inconsistent with the rule's focus on actual emissions, and unnecessary given our approach on de minimis reporting. Furthermore, see the preamble for the response to comments on GHG to report. Note that N_2O and CH_4 emissions from general stationary fuel combustion sources is required only for fuels for which there are default emission factors in subpart C, which simplifies the calculation and reduces the reporting burden.

Commenter Name: Paul L. Carpinone
Commenter Affiliation: Tampa Electric Company (TECO)
Document Control Number: EPA-HQ-OAR-2008-0508-0717.1
Comment Excerpt Number: 6

Comment: Tampa Electric believes that requiring the reporting of all indirect GHG emissions is overly burdensome. Instead, Tampa Electric urges EPA to adopt a de minimis threshold which would exempt reporting requirements for CH_4, N_2O, HFCs, PFCs, SF6 and other fluorinated gases including nitrogen trifluoride and hydrofluorinated ethers from emission sources at facilities that are required to report GHG emissions under proposed § 98.2(a)(2) and 98.2(a)(3). An appropriate de minimis threshold would be 100 tons per year of CO_2e, which is less than one half of one percent of the 25,000 tons per year threshold for sources required to report GHG emissions under these sections. For the de minimis to apply, facilities could be required to develop maximum potential to emit calculations that verify that certain sources would never generate more than the threshold de minimis emission amount.

Response: See the preamble for the response on de minimis reporting. Also, see the response to comment EPA-HQ-OAR-2008-0508-0455.1, excerpt 3.

Commenter Name: Carol E. Whitman
Commenter Affiliation: National Rural Electric Cooperative Association (NRECA)
Document Control Number: EPA-HQ-OAR-2008-0508-0483.1
Comment Excerpt Number: 5

Comment: Many of the existing GHG accounting protocols incorporate the concept of "de minimis" emissions. The GHG inventories of many entities consist of one or more GHG source categories that cover the vast majority of their emissions. For example, many utilities' GHG inventories are predominantly CO_2 emissions from stationary fuel combustion. For these major components, the entity will generally invest the time and money needed to use more

sophisticated quantification protocols. Beyond this, there can be a large number of additional, very small sources that may be widely dispersed and have minimal emissions. The time and resources needed to use the more sophisticated methods to quantify these emissions would not be justified because they would far outweigh any value added to the inventory or environmental benefit. As a result, many of the voluntary protocols have provisions for handling these de minimis emissions. Some of these methods include: * - Specifying a small percentage (3 to 5 percent) of emissions that can be excluded at the reporter's discretion; * - Requiring a quantification of the de minimis emissions with simple methods, such as mass balance methodology using default emission factors, but requiring them all to be reported nonetheless; and, * - Allowing a small percentage to be excluded, but requiring periodic quantification with simpler methods to demonstrate that they are within the mandated percentage allowance. EPA takes a different approach. They explicitly define all the source categories to be included (with the required quantification protocols) and established a minimum threshold for each category of emissions. If a facility's emissions for any category are under the threshold, it is not required to report them. If a facility has emissions in categories that EPA does not explicitly include, it does not have to report them. For example, §98.2(a)(1) of the draft regulations states: A facility that contains any of the source categories listed in this paragraph in any calendar year starting in 2010. For these facilities, the GHG emission report must cover all sources in any source category for which calculation methodologies are provided in subparts B through JJ of this part. (Underlining added). Similar language is included in each of the four categories of reporters defined in §98.2(a). We support this approach for the electricity sector, where the two primary categories are (1) fossil-fueled generation sources and (2) transmission and distribution components that emit SF6 and PFC emissions. This approach strikes a reasonable balance between the need to develop an accurate record of a facility's GHG footprint, and the cost and resources to compile and report the data. However, with this approach, there is still the possibility that electric generation facilities that exceed the 25,000 metric ton threshold may have some very small stationary combustion sources that would have to be reported. The work required by the reporters to identify these sources and calculate their GHG emissions each year would outweigh any potential additional benefit. We urge EPA to address this by providing exemptions that cover these small, insignificant sources. There is a similar concern for electricity transmission and distribution (T&D) systems. Once it has been determined that a T&D system has enough large equipment to exceed the reporting threshold for SF6 and PFCs, there is diminishing value in identifying and quantifying the capacity of the additional smaller pieces of equipment that contain those gases. We urge EPA to exempt these small, insignificant sources in determining the threshold for the electricity T&D facilities. Even with these more targeted exemptions, it could still become necessary to add a broader de minimis provision to the rule if, for whatever reason, EPA expands the list of source categories that must report and/or lowers the reporting threshold for each category.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Also, note that EPA is not going final with subpart DD (Sulfur Hexafluoridefluoride (SF6) from Electrical Equipment). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart DD at this time.

Commenter Name: Linda Farrington
Commenter Affiliation: Eli Lilly and Company (Lilly)
Document Control Number: EPA-HQ-OAR-2008-0508-0680.1
Comment Excerpt Number: 21

Comment: Lilly believes the requirement to report emissions from all stationary combustion sources at an affected facility, regardless of size, should be reconsidered. As currently proposed, the reporting rule requires the same degree of monitoring and reporting for very small combustion devices (such as generators, water heaters, small engines, etc. . . .) as for larger units (such as industrial boilers) at facilities that meet the applicability requires in §98.2. This results in costly monitoring for individual units in order to accurately estimate a very small percentage of a site's total GHG emissions. We believe the inclusion of a de minimis threshold would make the proposed rule more cost-effective by eliminating the need to install flow meters and perform frequent monitoring on very small units.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Ron Downey
Commenter Affiliation: LWB Refractories
Document Control Number: EPA-HQ-OAR-2008-0508-0719.1
Comment Excerpt Number: 2

Comment: Preamble G. 1, p 134. EPA requests comments on whether a De minimis reporting is appropriate for smaller sources. Under this Rule as proposed any source that consumes fuel (except a candle?) must be reported. In our opinion this creates an excessive burden and increases the cost of reporting GHG emissions under this rule. The provision for aggregating smaller sources is of some benefit. If the intent is to report every mcf, every pound of coal and every drop of oil, as the rule now requires, this will increase the reporting burden. Please confirm that our understanding is EPA's intention in this proposed rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Michael W. Stroben
Commenter Affiliation: Duke Energy Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0407.1
Comment Excerpt Number: 19

Comment: Duke Energy recommends that EPA give serious consideration to including a de minimus threshold for sources at a facility once it is determined that the facility exceeds the 25,000 metric ton reporting threshold. Identifying every fuel combustion source at a power plant and then monitoring the fuel use for those sources can become an extremely burdensome requirement, especially given the relatively small amount of emissions that these small sources would produce. Examples of the types of sources that might fall under a potential de minimus threshold could include things like space heaters and gas-fired hot water heaters. The de minimus threshold could be set as a percentage of the facility's total emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Frederick T. Harnack
Commenter Affiliation: United States Steel Corporation (USS)
Document Control Number: EPA-HQ-OAR-2008-0508-0681.1
Comment Excerpt Number: 3

Comment: The proposal must have a "de minimis" exclusion for individual sources. It is unreasonable and inconsistent to exempt facilities below a reporting threshold from reporting altogether while requiring facilities exceeding the reporting threshold to report all sources with any GHG emissions particularly considering that the de minim is sources will have negligible quantities with respect to total GHG emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Benjamin Brandes
Commenter Affiliation: National Mining Association (NMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0466.1
Comment Excerpt Number: 20

Comment: NMA believes that a de minimis exclusion is necessary, particularly for those sources that are required to report due to being a stationary fuel combustion unit. When looking at nonfuel mining facilities, there are many stationary fuel combustion units with large heat input capacity, and even more sources with very small heat input capacity (e.g. drying ovens in an assay lab, shop heaters, on-site kitchens, etc.). For stationary combustion units, the requirement to aggregate all units means that all stationary fuel combustion units are counted when determining if the facility is above the threshold. In explaining why a de minimis exemption is not necessary, EPA relies on the fact that if a facility is a source category, only emissions from the identified source categories are required to be reported upon. This rationale does not work for stationary fuel combustion units. EPA also states that given the simplified emissions estimation methods provided for small sources, this simplified method does not provide enough relief as facilities might be required to collect an unwieldy amount of data. The amount of work required to apply the emissions estimation method to multiple sources is overly burdensome.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374., excerpt 7.

Commenter Name: Robert J Martineau, Jr.
Commenter Affiliation: Counsel, Waller Lansden Dortch & Davis, LLP
Document Control Number: EPA-HQ-OAR-2008-0508-0414.1
Comment Excerpt Number: 10

Comment: As proposed, when a facility is subject to the reporting rule it must report all emissions from that source, if a method is specified. EPA’s rationale is that simplified emissions methods will strike a satisfactory balance between the burden on the source and complete inventory. EPA should include a "de minimis provision" in the rule to exclude de minimis sources from the reporting requirements. For example, emission points that constitute less than five percent of the facility’s total emissions should be excluded altogether. Alternatively, the facility should be allowed to simply estimate those emissions in a very simplified manner and no recordkeeping or monitoring requirements should be required. For example, small combustion sources such as hot water heaters and space heaters should be excluded.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 17

Comment: Nucor disagrees with the agency's conclusion that a de minimis exemption is not appropriate. While Nucor generally agrees that a facility-level reporting rule differs from an entity-level reporting rule, that difference by itself is not sufficient to eliminate the de minimis reporting issue. For example, at an EAF steel mill, in addition to the major emitting units such as the EAF, AOD, reheat furnace, annealing furnace, and ladle preheaters, there are also large quantities of very small sources that are difficult to track and capture. Examples include: (1) natural gas fired space heaters, typically < 200,000 btu/hour; (2) cut-off torches used for cutting scrap and cutting out cobbles in the mill; (3) QA/QC sample furnaces; (3) emergency generators of varying sizes and uses; (4) portable equipment, such as welders and compressors; (5) fossil-fuel fired pumps; (6) small process heaters; (7) hot water heaters for employee showers and bathrooms; (8) laundry facilities; (9) sanitary sewer vents and similar examples. Many states treat most if not all of these activities as trivial and/or insignificant, so they may not presently be inventoried. Nucor suggests that the rule either exclude all sources rated less than 1 mmbtu/hr or else allow a source to group all of these activities and assign a best engineering estimate based on an approximation of total fuel use and a generic emission factor. Any other approach will require an inordinate amount of resource use to track down an insignificant source of GHG emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Regarding portable and emergency equipment, the rule provides an exclusion portable equipment, emergency generators, and emergency equipment, as explained in the preamble. Also see the comment response document Volume 25: Subpart Q: Iron and Steel Production for responses to comments on the definition of this source category and the emissions sources that must be reported.

Commenter Name: William Yanek
Commenter Affiliation: Glass Association of North America (GANA)
Document Control Number: EPA-HQ-OAR-2008-0508-0586.1
Comment Excerpt Number: 8

Comment: EPA proposes to require glass producing facilities, and all other reporters meeting the emissions thresholds, to report emissions from all stationary combustion sources (except permitted emergency standby engines) for which EPA has provided measurement methods, regardless of the size of the unit or the amount of emissions attributable to that unit. 74 Fed. Reg. at 16473, 16478; proposed 40 CFR § 98.30(b). EPA expressly requests comments on this proposal, noting that state and regional emissions reporting programs allow reporters to exclude "a subset of emissions (e.g., 2 to 5 percent of facility-level emissions) or use simplified calculation methods for de minimis sources." Such an exclusion, EPA also notes, "avoid[s] imposing excessive reporting costs on minor emission points that can be burdensome or infeasible to monitor." 74 Fed. Reg. at 16473. EPA proposes to reject this de minimis standard

on the theory that state programs incorporating this exclusion require reporting at the corporate level, not the facilities level, and that the potential burden is likely to be small because many minor emission sources will not be the subject of EPA-provided measurement methods and thus will be beyond the obligation to report. GANA supports the inclusion of a de minimis exception such as the one CARS, a state facilities-reporting program, has accepted for its reporting program. GANA proposes that EPA establish a de minimis cut-off level based upon the size of the equipment - that is, its capacity to emit GHG or its maximum heat input capacity - and/or the percentage of emissions attributable to that unit of the facility's overall emissions. Specifically, GANA requests exemption of de minimis emission points with collective annual emissions, when operating at full capacity, that do not exceed five percent of the total facility-level emissions. The additional burden on glass manufacturers necessary to capture small emission sources, such as small space heaters and water heaters, far outweighs any benefit to be derived from the resulting data collected.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Furthermore, we did not go with the percentage calculated with potential to emit because we determined that this would be burdensome, inconsistent with the rule's focus on actual emissions, and unnecessary given our approach on de minimis reporting.

Commenter Name: Jessica S. Steinhilber
Commenter Affiliation: Airports Council International North America (ACI-NA)
Document Control Number: EPA-HQ-OAR-2008-0508-1063.1
Comment Excerpt Number: 7

Comment: As proposed, the GHG reporting would be comprehensive: all sources would have to be reported, with no de minimis exclusions; all relevant source categories would be included if any of the reporting thresholds are exceeded. This proposed requirement would be onerous, as airports have numerous sources with small amounts of emissions. One large airport, for example, may have over 75 stationary sources: everything from heating and refrigeration plants to space heaters. ACI-NA proposes that a de minimis threshold be established, with minimal or no reporting requirements for sources with emissions below the set threshold.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 16

Comment: In §§98.2(a)(1) and (a)(2), EPA specifies that reports must cover 'all sources…for which calculation methodologies are provided in subparts B through JJ.´ This procedure does not take into account very small sources that would require time and effort for an insignificant quantity of emissions. EPA should include wording in this paragraph to address de minimis sources. Very small individual sources at a covered facility could conceivably require as much effort as large sources, and yet the emissions from those sources would be insignificant relative to total site emissions. EPA indicates in the preamble that for small stationary combustion units, no fuel measurements would be required. However, that is only applicable to the high heat value (HHV) and CO_2 emission rate factors; fuel use would still need to be metered for very small

sources, which is a significant cost and burden. For example, the rule language would require monitoring and reporting of each domestic hot water heater, gas-fired space heater, and gas-fired stove. EPA should allow small individual sources totaling no more than 5% of total site emissions to utilize simplified calculations to estimate emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Stephen B. Kemp
Commenter Affiliation: Occidental Chemical Corporation (OCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0644.1
Comment Excerpt Number: 6

Comment: EPA's proposal inappropriately does not recognize, or provide an exemption from emissions calculation requirements, for any de minimis emissions and instead envisions that a facility must calculate emissions from each affected source, regardless of size. Thus, if a facility's existing emissions, in aggregate, are estimated to be greater than the 25,000 Metric Ton per year emission threshold, emission estimates or data from each affected source at that facility would need to be developed and reported. This would include small stationary combustion sources like welding machines and stationary generators. The emissions estimating and calculation, recordkeeping and financial burdens that would be imposed on small sources will far outweigh the added accuracy of including such sources in the facility report. Even existing GHG registries recognize exemptions for de minimis emissions, which are typically no more than 5% of a facility's total emissions. As provided by California's Registry: "For many participants, identifying and quantifying all of their GHG emissions according to the methodologies presented in this Protocol would be unduly burdensome and not cost-effective. Some participants may operate hundreds, if not thousands, of small facilities where the known emissions—including, for example, indirect emissions from electricity consumption or direct emissions from motor vehicle operation are a small fraction of larger emissions sources from industrial activities. To reduce the reporting burden, the California Registry requires that entities calculate at least 95% of their emissions according to the Protocol's methodologies. Thus, if necessary, up to 5% of emissions can be classified and reported as de minimis. However, the California Registry strongly encourages entities to report 100% of their emissions according to the methodologies laid out in the Protocol when possible. "Therefore, in order to reduce the reporting burden while retaining the requirement for complete emission reporting, you are allowed to use alternative, simplified estimation methods for any combination of individual emission sources (e.g., individual electricity generators, vehicles, furnaces, etc.) and/or gases, provided that the emissions from these sources and/or gases are less than or equal to 5 percent of our entity's total emissions. We request that IPA modify the proposed ndes to include a de minimis reporting threshold, equivalent to at least 5 percent of a facility's total emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Robert Rouse
Commenter Affiliation: The Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2008-0508-0533.1
Comment Excerpt Number: 10

Comment: The proposed rule does not contain any exclusions for de minimis sources. This can result in unwarranted burden on reporting companies. For example, a facility that is required to report emissions from all stationary fuel combustion units would need to include units such as gas fired water heaters for personal hygiene and cooking, space heaters in warehouse and process areas, etc. The provision in 98.2(a)(1) and (2) requiring that any facility meeting the definition and threshold of any of the source category to also report emissions from "any source category for which calculation methodologies are provided in subparts B through JJ," could also result in a facility spending considerable time accounting for a very small amount of emissions. Even with simplified calculation methods, this will require a significant amount of work to identify and estimate emissions from these types of units. It is very doubtful that the small amount of emissions from these types of units will impact any future climate change policy decisions. It is recommended that some type of de minimis exclusion be included in the final rule. One suggestion is that the rules exclude sources that emit less than some threshold quantity such as 1 ,250 metric tons per year (5% of 25,000 metric tons) or specifically exclude sources similar to those listed above. If a de minimis exclusion is not included in the rule, then EPA should allow for simplified estimation methods and aggregation of emissions for these types of units. Simplified methods in these cases are warranted as many of these small units do not have instrumentation to determine some of the required inputs, such as individual flow meters. Also, any data collected should be used for refining any de minimis exclusion language in future rulemakings.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: See Table 4
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0509.1
Comment Excerpt Number: 5

Comment: As written, if a facility is in one of the categories set forth in proposed 40 C.F.R. § 98.2(a)(1), such as cement manufacturing, then it would have to calculate and report emissions of carbon dioxide, methane, and nitrous oxide for every "stationary fuel combustion unit," which is defined very broadly as any equipment which combusts fuel, and which specifically includes "engines" and "process heaters," regardless of size. See proposed 40 C.F.R. §§ 98.30, 98.31, and 98.82. (Apparently this would even include sources as trivial as fuel-fired space heaters or Bunsen burners.) The burden of satisfying this requirement for small engines and process heaters could far outweigh any benefit. At a minimum, EPA should establish de minimis thresholds for fuel combustion units to be included in the required reporting for industrial facilities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Keith Overcash
Commenter Affiliation: North Carolina Division of Air Quality (NCDAQ)
Document Control Number: EPA-HQ-OAR-2008-0508-0588
Comment Excerpt Number: 20

Comment: We agree with adding de minimis provisions, particularly under the 25,000 ton reporting threshold. Large facilities that would meet the 25,000 ton threshold may have a large number of very small combustion operations, whose total emissions are a small percentage of the

facility total. A de minimis provision would significantly reduce the reporting burden for such facilities with large number of small operations, and would have a very little impact on the percent of emissions collected.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Kathleen Tobin
Commenter Affiliation: Verizon Communications, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0575.1
Comment Excerpt Number: 3

Comment: The EPA did not include a de minimis provision in the proposed rule which it states is the recent trend in these programs. The rationale behind the allowance of de minimis emissions is to minimize the reporting burden and maximize the benefit of standardized GHG emissions data by not imposing excessive reporting costs on minor emission points that can be difficult to monitor. The EPA is proposing to allow a simplified calculation for small sources rather than eliminate the need to report these emissions. "According to the EPA, the proposed rule — which is promulgated under the Clean Air Act — would cover 85% to 90% of greenhouse gas emissions in the United States." Since de minimis emissions are a quantity of small emissions that when summed up are typically equal to or less than 5% of the total emissions, elimination of these emissions would still allow the EPA to readily capture 95% of emissions. This would exceed the EPA's goal of capturing 85% to 90% of GHG emissions and would remove the burden on the regulated community to collect data that is difficult to capture with little change in the outcome. Although inclusion of de minimis emissions may not present a substantial burden as a result of the current reporting threshold of 25,000 metric tons, this would change if the current threshold is reduced. Including a de minimis provision in the final rule would prevent burdensome requirements on the regulated community with little environmental benefit, and would allow a company to focus on the larger emission sources rather than trying to track every smaller combustion source. For instance, based on Verizon's experience, the hours of operation for portable equipment and emergency engines are generally low. Emergency engines generally run only 50 hours per year, except in cases of catastrophic events that necessitate prolonged use of emergency generators. Without a de minimis provision, the data needed to calculate these minimal emissions would have to be collected on an individual basis, often from remote locations. Simplified methods to estimate this type of de minimis emission would most likely not eliminate the need to collect this data and would have little impact on the final inventory. Verizon therefore recommends that a de minimis provision be reinstated into future regulations that may consider corporate-wide reporting.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Furthermore, regarding the commenters statement about the threshold, the final rule retains the facility-level threshold of 25,000 metric ton CO_2e.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2008-0508-0513.1
Comment Excerpt Number: 5

Comment: Under §98.2(a)(1); (a)(2), reporting facilities must include emissions from "all sources…for which calculation methodologies are provided in subparts B through JJ." This procedure does not allow for omission of very small sources that would require time and effort for an insignificant quantity of emissions. EPA should include wording in this paragraph to exclude de minimis sources. EPA's discussion of its decision not to provide a de minimis source reporting exemption in the Preamble (74 FR 16473) is contradicted by the facts. EPA asserts that the rule "would require reporting of significant emission points only." 74 FR 16474. In fact, very small individual sources at a covered facility are included under §98.2(a)(1) and (2), and these could conceivably require as much effort as large sources, notwithstanding that emissions from those sources would be insignificant relative to total site emissions. EPA further indicates in the Preamble that for small stationary combustion units, no fuel measurements would be required. 74 FR 16473. However, that is applicable to only the higher heating value (HHV) and CO_2 emission rate factors; fuel use would still need to be metered for very small sources. That is a significant cost and burden with no equivalent corresponding benefit. As is typical in other reporting programs, EPA should allow small individual sources totaling no more than 5% of total site emissions not be included in the reporting process by covered entities. Records should be maintained demonstrating that estimated emissions from those units were below that threshold. If a significant shift in site emissions profile occurs, re-evaluation of the de minimis units should be done and reporting commenced for the largest of the prior de minimis units to maintain total de minimis units below the 5% emissions threshold. Establishing a de minimis element as part of a GHG reporting program would also be consistent with other types of GHG programs, such as the Western Climate Initiative (WCI). Because of the complexity associated with no de minimis monitoring and the fact that facility level fuel measurements ideally could capture total emissions, CIBO urges EPA to minimize effort associated with relatively minor sources of GHGs.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 8

Comment: El Paso recommends defining de minimis emission sources, i.e., emission sources exempt from reporting. Some sources at affected facilities are already exempt from reporting by the fact that the proposed regulation names reportable emission sources for each affected industry segment, i.e., emission sources not named for a specific industry segment will not be reported for facilities in that industry segment. Efforts required for reporting the smallest sources in a reportable emission category will be disproportionately high compared to the increase in the reported emissions. Inclusion of the smallest sources will not increase the accuracy of the facility emission estimates as most of the time the operating parameters for the small sources will be roughly estimated and not accurately measured. The approach of exempting emission sources of certain type or below a certain size is widely used in reporting of the criteria pollutants and is not considered to cause any significant negative impact on the quality on the overall reported emissions. Therefore, El Paso urges the EPA to apply its principle of balancing coverage and cost to single facilities and focus on main emission sources at each facility. The de minimis source type and size should be determined for each covered industry segment. For stationary combustion El Paso proposes that any equipment with a heat input equal to or less than 10 MMBTU/hr be exempt from reporting.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.1
Comment Excerpt Number: 8

Comment: EPA should add a de minimis provision to the GHG reporting regulations. The provision should: 1. Be available to all facilities; 2. Be optional; 3. Be limited at the minimum to 5% of that facility's total CO_2e emissions; 4. Require reporting of de minimis emissions by source category; 5. Allow for use of alternative methods selected by the operator; 6. Require annual reporting but updating only if major operational changes have occurred; 7. Require documentation of the alternative methods selected by the operator; and, 8. Exempt recordkeeping and reporting provisions for sources under the 5% de minimis threshold.

Response: See the preamble for the full rationale and response on de minimis reporting. Given that EPA has addressed small emission source in other ways and is not providing a de minimis reporting exclusion based on a percent of a facility's emissions for reasons explained in the preamble, the commenter's specific suggestions 1, 2, 3, 4, 5, and 8 for designing such a de miminis program are not being implemented. For the response to the suggestion (item 6) to report only if operational changes occur rather than annually, see the comment response document on the frequency of reporting. Regarding the documentation of alternative methods selected by the operator (item 7), the rule requires reporters to use the source category-specific GHG calculation and monitoring methodologies contained in the rule and does not allow reporters to select other methods of their choice for reasons discussed in the preamble section on de miminis reporting and the general monitoring approach. However, in response to public comments, EPA has made changes to simplify and provide additional flexibility in the GHG monitoring and calculation methods where appropriate. See the preamble sections and comment response documents on the individual source category subparts for discussion of such changes.

Commenter Name: John R. Evans
Commenter Affiliation: LyondellBasell Industries
Document Control Number: EPA-HQ-OAR-2008-0508-0718.1
Comment Excerpt Number: 3

Comment: In the proposed mandatory reporting rule, EPA solicits comment on the inclusion of de minimus reporting provisions: "EPA requests comment on whether this approach to smaller sources of emissions is appropriate, or if we should include some type of de minimis provision."(74 FR 68, page 16473) LyondellBasell supports the inclusion of de minimis provisions. Furthermore, it is proposed that a 5% de minimis reporting level be included in the rule and be structured as follows: Be available to all facilities; Be optional; Require reporting of de minimis emissions by source category but allow for use of alternative calculation methods selected by the operator; Require annual reporting but updating only if major operational changes have occurred. In the proposed rule EPA recognizes that a number of existing GHG reporting programs contain "de minimis" provisions to reduce the reporting burden associated with smaller emission sources within a facility. EPA acknowledges that existing programs include such provisions to avoid imposing excessive reporting costs that can be burdensome and

infeasible. If a de minimis provision is included, values for all of the emission categories would still be reported, thus the scope of coverage would not be reduced and there would be no reduction in the program benefits. Including a de minimis provision will serve to significantly lower the cost and burden on the regulated community.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 8.

Commenter Name: [name not given]
Commenter Affiliation: Texas Association of Business
Document Control Number: EPA-HQ-OAR-2008-0508-0698
Comment Excerpt Number: 6

Comment: It is important to recognize that a de minimis limit for individual sources within a facility is appropriate to reduce overall reporting costs that would otherwise be attributed to insignificant sources. Other programs recognize this need and provide either an exemption from reporting minor sources or simplified calculation methods for estimating net emissions from minor sources.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Dean C. DeLorey
Commenter Affiliation: Beet Sugar Development Foundation (BSDF) Environmental Committee
Document Control Number: EPA-HQ-OAR-2008-0508-0559.1
Comment Excerpt Number: 7

Comment: A de minimis exemption is appropriate especially for small stationary sources. Although EPA suggests only significant emission points are affected, it would be less subject to interpretation if a de minimis level was established rather than simplified calculation methods which still require significant recordkeeping, evaluation and documentation efforts.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Stuart A. Clark
Commenter Affiliation: Washington State Department of Ecology (Ecology)
Document Control Number: EPA-HQ-OAR-2008-0508-0646.1
Comment Excerpt Number: 7

Comment: The rule should include a percentage based de minimis: The proposed rule does not include a percentage de minimis level for emissions, and allows simplified calculations only for a few specified small sources. Based on our experiences developing reporting requirements for both the WCI and our own state reporting rule, Ecology disagrees with this approach as too limited. Our reporting requirements allow for a reporting de minimis for both direct and indirect GHG emissions. This provides appropriate flexibility in accounting methodologies where further collection of information would be excessively burdensome to the source, without necessarily resulting in improved accuracy of data. Ecology therefore supports a 3-5 percentage de minimis in EPA's proposed rule. The de minimis provision should be modeled after The Climate

Registry's General Reporting Protocol, Version 1.1, May 2008 Chapter 11 Simplified Estimation Methods.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Keith Adams
Commenter Affiliation: Air Products and Chemicals, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-1142.1
Comment Excerpt Number: 7

Comment: EPA's proposal does not allow for any de minimis emissions and instead expects each facility to calculate emissions from each affected source, regardless of size. However, other existing greenhouse gas registries allow for the inclusion of de minimis emissions, which are typically no more than 5% of a facility's total emissions. The intent is to report such emissions, but to allow reduced rigor in the emission calculation methodology, data sources, and supporting documentation. We strongly urge EPA to consider adopting such a de minimis threshold, which would acknowledge the difficulty in quantifying emissions from small units while still holding facilities to accurate emissions reporting. Specifically, the provision should: 1. Be available to all facilities; 2. Be optional; 3. Be limited to a maximum to 5% of that facility's total CO_2-e emissions; 4. Allow for use of alternative methods selected by the operator; 5. Require annual reporting but updating only if major operational changes have occurred; and 6. The alternative methods selected by the operator must be documented. EPA acknowledged that other existing GHG reporting programs contain "de minimis" provisions, and that the goal of a de minimis provision is to avoid imposing excessive reporting costs on minor emission points that can be burdensome or infeasible to monitor. Examples include the California mandatory GHG reporting rule and voluntary reporting under The Climate Registry. However, EPA did not include a de minimis provision because the EPA did not want to exclude a percentage of emissions from reporting. Air Products agrees with the EPA that all emissions should be reported. However, we do not agree with the EPA that the proposed rule provides adequate simplified emission estimation methods for small emissions sources.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 8. Also, in response to comments, we have made changes to several subparts of the rule to simplify calculation methods for small emission sources and allow flexibility where appropriate. For example, EPA has expanded a provision in subpart C that allows facilities to aggregate small combustion units and report emissions as a single value. EPA has also expanded the types of units that can use the simplified Tier 1 and Tier 2 GHG calculation methods. See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. For discussion of such changes, see the preamble and the comment response sections on the individual source category subparts.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 7

Comment: EPA's proposal does not allow for the designation of emissions as de minimis and instead expects each facility to calculate emissions from each affected source, regardless of level of emissions or size. However, other existing greenhouse gas registries allow for the designation

of de minimis emissions, which typically amount to no more than 5% of a facility‘s total emissions. We strongly urge EPA to consider adopting such a de minimis threshold, which would acknowledge the difficulty in quantifying emissions from small units while still holding facilities to accurate emissions reporting. California‘s Mandatory Reporting Rule defines de minimis as follows: De minimis´ means those emissions reported for a source or sources that are calculated using alternative methods selected by the operator, subject to the limits specified in section 95103(a)(6). California‘s Section 95 103 (a)(6) reads as follows: “Emissions Calculation and Reporting Procedures for De Minimis Sources. The operator may elect to designate as de minimis one or more sources that collectively produce no more than 3 percent of the facility‘s total CO_2 equivalent emissions, not to exceed 20,000 metric tonnes CO_2 equivalent emissions. The operator may estimate emissions for these de minimis sources using alternative methods of the operator‘s choosing, subject to the concurrence of the verification team that the use of such methods provides reasonable assurance that the emissions so designated and estimated do not exceed the applicable de minimis limits. The operator shall separately identify and include in the emissions data report the emissions from designated de minimis sources. The operator shall determine CO_2 equivalence according to the 100-year global warming potentials provided in Appendix A.” The Climate Registry also recognizes de minimis emissions in chapter 11 of its General Reporting Protocol: Therefore, in order to reduce the reporting burden while retaining the requirement for complete emission reporting, you are allowed to use alternative, simplified estimation methods for any combination of individual emission sources (e.g., individual electricity generators, vehicles, furnaces, etc.) and/or gases, provided that the emissions from these sources and/or gases are less than or equal to 5 percent of your entity‘s total emissions.´ Note that both of these programs still require the calculation of emissions from all sources, but also recognize the difficulty in determining exact emissions from every point source at a facility. In fact, EPA‘s supporting memorandum titled [3]Reporting Methods for Small Emission Points (De Minimis Reporting)´ also recognized this problem. The TSD stated that: … some facilities that exceed the reporting threshold could have some small sources of certain GHG species. The existing GHG reporting programs provide simplified emissions estimation methods for these small sources, but still require that emissions for all sources have to be reported. This appears to be a practical and feasible approach for the Federal mandatory rule as well. We strongly urge EPA to adopt a de minimis policy that is consistent throughout the reporting rule source categories, and allow for up to 5% of a site‘s total emissions to be calculated using simplified emissions estimation methods. As the proposal is written, simplified calculations are not allowed at all for many source categories.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Thomas W. Easterly
Commenter Affiliation: Indiana Department of Environmental Management (IDEM)
Document Control Number: EPA-HQ-OAR-2008-0508-0525.1
Comment Excerpt Number: 27

Comment: Reporting requirements should initially focus on the largest fossil-fueled GHG emitters. De minimis reporting for minor emission points is unnecessary and should not be required but could be allowed if a facility chooses to voluntarily report the information. Depending on the benefits associated with these voluntarily reported results, additional de minimis processes may be identified and considered for reporting at a later date.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Nancy N. Young
Commenter Affiliation: Air Transport Association of America, Inc. (ATA)
Document Control Number: EPA-HQ-OAR-2008-0508-0522.1
Comment Excerpt Number: 18

Comment: ATA also believes that facility reporting should include a de minimis exception, based upon a methodology that allows for estimation of emissions below a reasonable, specified threshold of significance.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Niki Wuestenberg
Commenter Affiliation: Republic Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0557.1
Comment Excerpt Number: 12

Comment: Republic also encourages EPA to reconsider whether reporting of de minimis emission points is necessary. In the preamble to the proposed rule, EPA states that it "analyzed the de minimis provisions of existing reporting rules" but concluded that "there is no need to exclude a percentage of emissions reporting." On the contrary, excluding de minimis emission points would further EPA's stated goal of minimizing the burden of the program by excluding small emitters. EPA appropriately excludes portable equipment and emergency generators, but should also consider other de minimis emission points to help minimize the total reporting burden imposed on covered sources.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Greg Scott
Commenter Affiliation: National Petrochemical & Refiners Association
Document Control Number: EPA-HQ-OAR-2008-0508-0212w
Comment Excerpt Number: 8

Comment: If the Reporting Rule allows, quote, "good engineering judgment," close quote, for estimating emissions and no verification process is required, then the de minimis designation of some small sources is moot. If, on the other hand, the Reporting Rule defines in detail the emissions estimating methodology prescribes maximum uncertainty levels and subjects the estimates to third-party verification with risk of noncompliance for deviating from the prescribed methods, then the de minimis designation of some small emission sources will be critical to reduce the reporting burden and, in some cases, protect CBI. NPRA believes that the de minimis constraint should be placed at 5 percent of total emissions or 50,000 tons per year, whichever is larger. State GHG registries have indicated that they will use a 5-percent threshold for their programs.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Also see the preamble for responses on the emissions verification approach and CBI.

Commenter Name: James Greenwood
Commenter Affiliation: Valero Energy Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0571.1
Comment Excerpt Number: 8

Comment: Valero urges the EPA to include a de minimis threshold in the inventory for noncombustion sources at refineries as they have for all other source categories. EPA acknowledged that other existing GHG reporting programs contain "de minimis" provisions, and that the goal of a de minimis provision is to avoid imposing excessive reporting costs on minor emission points that can be burdensome or infeasible to monitor. The EPA concern that a significant level emission would not be captured in the inventory due to the use of a de minimis threshold is unfounded in the context of a petroleum refinery. In fact, the tracking of combustion related emissions alone accounts for the vast majority of a refinery's GHG emissions. Moreover, just as it becomes excessively burdensome for other source categories to attempt to quantify noncombustion emissions from de minimis sources, it is very burdensome for refineries.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Lisa D. Schmidt
Commenter Affiliation: Dow Corning Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0562
Comment Excerpt Number: 8

Comment: Our experience as members of the Chicago Climate Exchange, and with our main site in Europe, has shown that choosing a de minimis that excludes not more than 5% of emissions from small point sources can significantly reduce the reporting burden, and have little impact on the GHG inventory accuracy.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Peter Boag
Commenter Affiliation: Canadian Petroleum Products Institute (CPPI)
Document Control Number: EPA-HQ-OAR-2008-0508-0428.1
Comment Excerpt Number: 7

Comment: The concept of de minimus emissions can be considered from a couple of perspectives. De minimus can relate to small volumes that have limited significance relative to a facility total. Another perspective is for situations of relatively small volumes occurring in multiple locations. In both cases, what is important is to roughly weigh the work or cost to estimate the emissions versus the potential size of the emissions being considered. This assessment may result in concluding that investing resources is not warranted, or alternatively that there is value in estimating the small volumes, but only if a highly simplified low cost method is applied. This approach to de minimus is principled based, and would be applied to a

given situation. Being limited to a fixed percentage of 3% or 20,000 metric tonnes may be too high in certain situations or too low in other cases.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Erik Bakken
Commenter Affiliation: Tucson Electric Power Company
Document Control Number: EPA-HQ-OAR-2008-0508-0489.1
Comment Excerpt Number: 4

Comment: The final rule should include de minimis threshold(s) to exclude small sources of emissions at facilities otherwise required to report. In the proposed rule, EPA acknowledges that the reporting obligations need to strike a balance between capturing the majority of emissions and not placing an undue burden on small emission sources. TEP believes that the most straightforward means of achieving that balance it by including de minimis exclusion for small sources. EPA states that a de minimis exclusion is not needed because only sources with established methodologies are required to report emissions. While this may be the case currently, it is possible that EPA will eventually develop a reporting methodology for a source category for which there is wide variation in the emission levels from sources within that category. At that point in time, adding a de minimis exclusion may be difficult as it may appear to be a relaxation of the requirements. A de minimis exclusion for small sources of emissions is consistent with EPA's overall approach and should be included in the rule and the outset.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Leslie Sue Ritts
Commenter Affiliation: National Environmental Development Association
Document Control Number: EPA-HQ-OAR-2008-0508-0504.1
Comment Excerpt Number: 4

Comment: IF EPA REQUIRES REPORTING BY EQUIPMENT OR PROCESS as it proposes to do in a number of the subparts for specific industrial categories, then the Agency must adopt a de minimis reporting level to enable facilities to be able to focus their resources on accounting for carbon emissions from equipment or processes that may have the most substantial impact on world-wide carbon levels in the atmosphere. NEDA/CAP suggests following the lead of other GHG reporting programs and exempting in the final rule, equipment that emit less than 5% of a facility's total CO_2e emissions on a unit basis. EPA also must offer a rationale for requiring emissions accounting is required on a unit or process basis for specific industry subparts, and evaluate whether such requirements will necessitate a delay in the date of applicability of the program in order to provide adequate time for companies to inventory and assess how to analyze emissions on these bases. Even if EPA requires reporting as proposed on a facility-wide basis, we also submit that such a rule should explicitly delete the coverage of emergency generators and other small GHG units such as photocopiers, water pumps, and small appliances. Clarification and a de minimis value or temperature trigger for carbonate use also would be appreciated. If such a de minimis is not included, we believe that calculating the emissions from these units, even in determining facility applicability, would comprise a sizeable effort for very little value.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. For the response to the comment on the need to report unit and process level data, see the preamble responses on the level of reporting and the general content of the annual GHG report, and the separate comment response document volumes on those topics. See the preamble section on "Miscellanous Uses of Carbonates" for the response to the comment on carbonate use. Portable equipment, emergency generators, and other emergency equipment are exempt from the reporting requirements (see 40 CFR 98.3(b)). Photocopiers and electrical appliances are not covered by the rule. Only source categories for which calculation methods have been specified are required to report.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.1
Comment Excerpt Number: 2

Comment: The Agency has the capability in many places to streamline the program and reduce the reporting burden on the affected industries. By providing a de minimis reporting structure, a significant reduction in costs can be achieved without sacrificing data quality and accuracy.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Jerry Call
Commenter Affiliation: American Foundry Society (AFS)
Document Control Number: EPA-HQ-OAR-2008-0508-0356.2
Comment Excerpt Number: 8

Comment: Even though foundries are not identified as a listed source category in the proposed regulation, AFS would like to provide comments on sections 98.2(a)(1) and (a)(2) which provide that “all sources…for which calculation methodologies are provided in subparts B through JJ” be quantified. This procedure does not allow for omission of very small sources that would require time and effort for an insignificant quantity of emissions. EPA should include regulatory language to exclude emissions from de minimis sources. While EPA discusses the de minimis reporting issue in the preamble (74 Fed. Reg. at 16473), requiring the reporting of emissions from such de minimis sources is not necessary and would be unduly burdensome. Very small individual sources at a covered facility could conceivably require as much effort as large sources, and the emissions from those sources would be insignificant relative to total site emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: George Woods
Commenter Affiliation: E. Roberts Alley & Associates, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0269.1
Comment Excerpt Number: 5

Comment: While it is understood that there is a “de minimis” level for reporting in order to reduce the burden of reporting on minor emission points, why not go ahead and include the minor emission points, too? Based on past history, such as MACT rules for Major sources of

HAP, then MACT rules for area sources, it is only a matter of time before the Sierra Club and other environmental groups will be taking EPA to court for the inclusion of minor sources. In the long run it is going to be the smaller businesses and consumers that are going to bear the cost of the program.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Wesley L. McNealy
Commenter Affiliation: Pepco Holdings, Inc. (PHI)
Document Control Number: EPA-HQ-OAR-2008-0508-0547.1
Comment Excerpt Number: 9

Comment: PHI agrees with the exemption that EPA is proposing for portable equipment or generating units designated as emergency generators in a permit issued by a state or local air pollution control agency. In addition, PHI requests that EPA clarify that other de minirnis sources presently exempt from regulation will remain so and not need to be included in facility emission calculations. There are variations from state to state regarding the regulation of these sources including whether a permit is required or what constitutes an emergency generator. EPA should eliminate the permit requirement from this definition, and instead define emergency generator separately for the purpose of this exemption and make it clear that emergency generators and other de minimis sources are exempt from every source category and not only electricity generation.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. For the response on the exclusion for and definition of emergency generators, see the preamble section on subpart D.

Commenter Name: Robert N. Steinwurtzel
Commenter Affiliation: Bingham McCutchen LLP on behalf of Association of Battery Recyclers (ABR)
Document Control Number: EPA-HQ-OAR-2008-0508-0660.1
Comment Excerpt Number: 7

Comment: On page 16,473 of the Proposed Rule, EPA discusses analysis of de minimis emissions provisions found in a number of other existing GHG reporting programs and the decision not to include de minimis provisions in the Proposed Rule. 73 Fed, Reg. at 16,473. The goal of a de minimis provision is to avoid imposing excessive reporting burdens on minor emission points. Id. EPA acknowledges the burden of reporting emissions for smaller sources, and points out that the Proposed Rule addresses this concern in several ways, including simplified emissions estimation methods for smaller sources, where appropriate.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 17

Comment: Corporations reporting into multiple climate change registries should only be required to compile one set of reporting information, and should be able to utilize the data to consistently report corporate-wide GHG emissions. These existing registries have evolved over time and now include several important features that EPA should consider. One feature is the California 3% exemption for insignificant activities, such as co-located research and development facilities and pilot plants. By only requiring direct emissions and supply reporting, EPA eliminates a potential inconsistency issue between the mandatory reporting system and other systems in which reporters may participate.

Response: See the preamble for the response on de minimis reporting for small emission points. For the response to the comment regarding the exemption of pilot plants and research and development facilities, see the preamble response on other general rule requirements. For the response to the comment on consistency with other GHG registries, see the preamble for the response on the relationship of this rule to other programs.

Commenter Name: Rhea Hale
Commenter Affiliation: American Forest & Paper Association (AF&PA)
Document Control Number: EPA-HQ-OAR-2008-0508-0909.1
Comment Excerpt Number: 28

Comment: In addition to EPA's identification of specific sources for reporting, there should be an aggregate de minimis exclusion of 5% for a facility. If any of the EPA named sources that are required to report within a facility fall below the de minimis level, the entity/facility should not be required to report those emissions. In aggregate, combined emissions from such sources can not exceed the de minimis level. Examples of such sources for the pulp and paper industry would likely be landfills and wastewater treatment systems. As NCASI analysis indicates, these combined emissions represent less than 3% of the industry's fossil fuel based emissions. The administrative burden of reporting emissions below such a threshold is not warranted.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.EPA is not going final with subpart II (Wastewater Treatment) or with the reporting requirements for industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on these subparts at this time.

Commenter Name: Marcelle Shoop
Commenter Affiliation: Rio Tinto Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0636.1
Comment Excerpt Number: 14

Comment: Rio Tinto requests that EPA adopt a de minimis threshold that would allow a reporter to avoid reporting of emissions if they represent less than 5 percent of facility-level emissions or allow such facilities to use simplified methods for estimating such emissions (l.e., for a source meeting the de minimis threshold, a reporter could estimate emissions using simplified measurement or calculation methods even if those methods differ from the calculation methodologies specified in subparts B through JJ). At a minimum, we request that EPA modify the rule to allow reporters who qualify for a de minimis provision under state or regional

reporting program that requires verification (e.g., TCR) to classify the emissions as de minimis rather than quantifying and reporting small emissions amounts.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: J. Jared Snyder
Commenter Affiliation: New York State Department of Environmental Conservation
Document Control Number: EPA-HQ-OAR-2008-0508-1184
Comment Excerpt Number: 12

Comment: The Department agrees with the approach EPA has described which obviates the need to establish a de minimis level for reporting GHG emissions from minor emission points within a facility as part of this rule. For example, small stationary combustion units that exceed the threshold in EPA's proposal could use a default emission factor and heat rate to estimate emissions, and no fuel measurements would be required. Where simplified methods are proposed, they are described in the relevant discussions in Section V of the preamble. The Department does not see a compelling reason for establishing a de minimis level as part of this type of reporting program.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 12

Comment: EPA's proposal does not provide for any de minimis emissions and instead, would require each facility to calculate emissions from each affected source, regardless of size. Many complex facilities have myriad equipment and a number of small sources of emissions, in addition to larger sources. Facilities could spend over 50% of their resources in attempting to determine emissions from sources that contribute less than 5% to the overall facility GHG emissions. BP recommends that EPa adopt a 5% de minimis reporting limit, similar to the de minimis methodology employed in the General Reporting Protocol of the California Climate Action Registry (CCAR). Under this method, a reporting facility may estimate emissions for these de minimis sources using alternative methods of the operator's choosing, with the condition that these methods provides reasonable assurance of accuracy and that the emissions so designated and estimated do not exceed 5% of the total facility emissions. It is not cost effective to large amounts of time and resources to monitor and calculate a very small fraction of refinery emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Steven M. Pirner
Commenter Affiliation: South Dakota Department of Environment and Natural Resources (SD DENR)
Document Control Number: EPA-HQ-OAR-2008-0508-0576
Comment Excerpt Number: 9

Comment: EPA requests comments on whether the approach to smaller sources of emissions is appropriate in the Proposed Rule or if EPA should include some type of de minimis provision. EPA states the Proposed Rule affects only larger facilities, only requires reporting of significant emission points, and contains simplified reporting where practicable. SD DENR agrees with EPA's approach in the Proposed Rule and believes the de minimis exclusion is already built in.

Response: EPA thanks the commenter for their input. See the preamble for the response on de minimis reporting.

Commenter Name: See Table 4
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0604.1
Comment Excerpt Number: 8

Comment: EPA's proposal does not allow non-reporting of any de minimis emissions. Rather, the rule appears to require that each facility calculate emissions from each affected source at a facility covered by the rule, regardless of size of the source. In so doing, the rule fails to recognize the difficulty in quantifying emissions from dozens or even hundreds of very small units at a site. The simplified calculations provided in the supporting memorandum titled "Reporting Methods for Small Emission Points (De Minimis Reporting)" do not address all such small emission points. The Agency should consider crafting provisions similar to those included in other greenhouse gas registries (CCR and TCR,) which allow for the exclusion of de minimis emissions. Typical de minimis emissions levels are set at 5% (total for all non-reported emissions) of a facility's total emissions EPA should consider de minimis exclusions In §98.2(a)(1); (a)(2), EPA specifies that reports must cover "all sources... for which calculation methodologies are provided in subparts B through JJ.".

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Gregory M. Adams
Commenter Affiliation: Sanitation Districts of Los Angeles County
Document Control Number: EPA-HQ-OAR-2008-0508-0710.1
Comment Excerpt Number: 7

Comment: The exclusion of de minimis reporting will greatly add to the burden of facilities in the program. Any facility large enough to be captured in the program will have a myriad of smaller, ancillary equipment in support functions that aren't individually metered. To require separate, detailed accounting for each piece of equipment regardless of size will greatly expand the complexity and cost of both reporting and verification while adding little to the program's accuracy. This unnecessary requirement will be particularly harsh on facilities preparing quarterly reports as floated in the Waxman-Markey bill now under discussion. Again, EPA should follow the example of CARB and require reporting only for sources above a de minimis level.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Patrick J. Nugent
Commenter Affiliation: Texas Pipeline Association (TPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0460.1
Comment Excerpt Number: 7

Comment: The "all in" approach to emissions reporting is inadvisable because it would require reporting of insignificant emission sources. As proposed, the rule would (with some exceptions) require reporting of all emissions contributing to a facility's exceedence of the 25,000 metric ton/year threshold, regardless of how insignificant a particular portion of the overall emission total might be. See 74 Fed. Reg. 16473-74. An operator should not be put to the burden and expense of monitoring and reporting de minimis portions of the >25,000 metric ton/year emissions amount, as this would be inefficient and would not pass a reasonable cost/benefit test. If EPA does not allow the use of a simpler and more cost-effective method for estimating emissions, such as the API Compendium methods, then TPA urges EPA to adopt a list of de minimis sources of GHG emissions that would be excluded from the requirements of the proposed rule or simplified reporting for small emission points. This is essentially the same recommendation made by ERG to EPA in a February 12, 2009 memorandum on Reporting Methods for Small Emissions Points (De Minimis Reporting) that is a part of the docket for this rulemaking. We urge EPA to follow the recommendations made by its own consultant and allow simplified methodologies for smaller emissions sources such as certain fugitive sources in the oil and natural gas sector.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Also please note that EPA is not going final with subpart W (Oil and Gas Systems). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart W at this time.

Commenter Name: Matthew G. Paulson
Commenter Affiliation: LLP on behalf of BCCA Appeal Group
Document Control Number: EPA-HQ-OAR-2008-0508-0649.1
Comment Excerpt Number: 8

Comment: There is a need to provide relief for covered entities from reporting de minimis emissions at covered sources. For example, once the reporting threshold is triggered, the reporting rule could allow up to, e.g., 5% of the emissions to be declared as de minimis and allow simplified emission estimation methods for demonstrating compliance with the de minimis emission level. Other GHG reporting programs recognize that typical uncertainty ranges associated with GHG emissions data make it infeasible that reported information can attain better than 95% accuracy for the reported information. Therefore, most other programs have some type of provision to reduce the burden for smaller emissions sources. Depending on the program, the reporter is allowed to either not report a subset of emissions (e.g., 2% to 5% of facility-level emissions) or use simplified calculation methods for such de minimis sources.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Sam Chamberlain
Commenter Affiliation: Murphy Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0625
Comment Excerpt Number: 5

Comment: EPA contends that under its program design there is no need to exclude a percentage of emissions from reporting under the proposed rule. The rationale provided is: a) Only facilities over the established thresholds would be required to report; b) For facilities subject to the rule, only emissions from those source categories for which methods are provided would be reported; and c) Some facilities subject to the rule could still have some relatively small sources, but the proposed rule includes simplified methods for smaller sources, where appropriate. "EPA requests comment on whether this approach to smaller sources of emissions is appropriate or if we should include some type of de Minimus provision." (74 FR 68, page 16473) As previously stated, Murphy has first-hand experience to encourage EPA to implement a reporting program, designed in such a way, that once the reporting threshold is triggered, the reporting rule should allow up to 5% of the emissions to be declared as "de Minimus", and allowing simplified emission estimation methods for demonstrating compliance with this emission level. Murphy can confirm that it may not be possible, or efficient, to specify the reporting methods for every source that must be reported. EPA must also recognize that typical uncertainty ranges associated with GHG emissions data make it infeasible that reported information can attain better than 95% accuracy for the reported information. In addition, many flow, analytical and emission monitoring instruments in service today are calibrated with less than 5% accuracy. Murphy strongly supports the inclusion of a 5% de Minimus factor for reporting of GHG emissions or we recommend the option to use simplified calculation methods for the identified de Minimus sources. That is, these calculations and methodologies employed for the de Minimus estimates would be available for review during the verification process.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Ram K. Singhal
Commenter Affiliation: Rubber Manufacturers Association (RMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0600
Comment Excerpt Number: 14

Comment: Page 16,473 of the NPRM discusses the need for a de minimis exemption and the potential burden of reporting emissions for certain types of facilities if there is no de minimis exemption. If EPA were to change the proposed rule and require emissions reporting on the basis of a process line or unit, these rationales for not having a de minimis level would no longer exist. In that case, EPA recommends a de minimis level based on 1,000 tons of GHG.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Chris Hobson
Commenter Affiliation: Southern Company
Document Control Number: EPA-HQ-OAR-2008-0508-1645.2
Comment Excerpt Number: 8

Comment: After an emissions baseline is established through initial comprehensive annual reporting, costs can be lowered while still obtaining sufficient data for the purposes of this program by adding de minim is provisions. Adding a de minimis exclusion provision could significantly lower costs to reporting entities and simplify reporting and verification, without compromising the quality of data.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Dan F. Hunter
Commenter Affiliation: ConocoPhillips Company
Document Control Number: EPA-HQ-OAR-2008-0508-0515.1
Comment Excerpt Number: 9

Comment: ConocoPhillips appreciates EPA limiting the reporting requirements to 1.) larger sources where clear methodologies are provided and 2.) some simplification of the reporting requirements for smaller sources. However, ConocoPhillips recommends EPA include a de minimis provision and exclude additional small sources from the reporting rule. ConocoPhillips urges EPA to consider this approach for the final rule to further reduce the reporting burden. The reporting program should be designed in such a way that once the reporting threshold is triggered, the reporting rule allows for up to 5% of the emissions to be declared as “de minimis”. The de minimis provision should: 1.) Allow the use of simplified engineering estimation methods selected by the operator; 2.) Based on best available data and not require monitoring and measurements; 3.) Include de minimis emissions in the facility total, but not require additional reporting; 4.) Have the option to apply a calculated emissions factor to subsequent reporting years, unless major operational changes have occurred. Also, ConocoPhillips believes EPA’s “Technical Support Document for the Petroleum Refining Sector: Proposed Rule for Mandatory Reporting of Greenhouse Gases” supports several “other” sources being excluded from the reporting rule.

Response: See the preamble for the response on de minimis reporting.

Commenter Name: Claire Olson
Commenter Affiliation: Basin Electric Power Cooperative
Document Control Number: EPA-HQ-OAR-2008-0508-0637.1
Comment Excerpt Number: 10

Comment: Many of the existing GHG accounting protocols incorporate the concept of "de minimis" emissions. The GHG inventories of many entities consist of one or more GHG source categories that cover the vast majority of their emissions. For these, the entity will generally invest the time and money needed to use more sophisticated quantification protocols. Beyond this, there can be a large number of additional, very small sources that may be widely dispersed and have minimal emissions. The time and resources needed to use the more sophisticated methods to quantify these emissions would far outweigh any value added to the inventory and, thus, would not be justified. As a result, many of the voluntary protocols have provisions for handling these de minimis emissions. Some of these methods include: 1. Specifying a small percentage (3 to 5 percent) of emissions that can simply be excluded at the reporter’s discretion; 2. Requiring a quantification of the de minimis emissions with simple methods, such as mass balance methodology, but requiring them all to be reported nonetheless; and, 3. Allowing a small

percentage to be excluded, but requiring periodic quantification with simpler methods to demonstrate that they are within the mandated percentage allowance. EPA takes a different approach. EPA explicitly defines all the source categories to be included (with the required quantification protocols) and established a minimum threshold for each category of emissions. If a facility's emissions are under the threshold, it is not required to report them. If a facility has emissions in categories that EPA does not explicitly include, it does not have to report them. For example, §98.2(a)(1) of the draft regulations states: A facility that contains any of the source categories listed in this paragraph in any calendar year starting in 2010. For these facilities, the GHG emission report must cover all sources in any source category for which calculation methodologies are provided in subparts B through JJ of this part. Similar language is included in each of the four categories of reporters defined in §98.2(a). Basin Electric supports this approach for the electricity sector, where the two primary categories are fossil-fueled generation sources and transmission and distribution components that emit SF6 and PFC emissions. It strikes a reasonable balance between the need to develop an accurate record of a facility's GHG footprint, and the cost and resources to compile and report the data. If, for whatever reason, EPA expands the list of source categories that must report and/or lowers the reporting threshold for each category, it could become necessary to add a de minimis provision to the rule.

Response: EPA thanks the commenter for their input. See the preamble for the response on de minimis reporting. At this time, EPA is not going final with subpart DD (Sulfur Hexafluoridefluoride (SF6) from Electrical Equipment). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart DD at this time.

Commenter Name: Shannon Lucas
Commenter Affiliation: Texas Mining and Reclamation Association (TMRA)
Document Control Number: EPA-HQ-OAR-2008-0508-1028.1
Comment Excerpt Number: 2

Comment: The approach to de minimis requirements is efficient and it will prevent requiring regulated industries from implementing burdensome monitoring procedures for small sources of GHG emissions. By requiring reporting of GHG emissions from categories of sources, EPA has excluded many types of de minimis GHG emissions sources that would be onerous to track, monitor, and report. TMRA supports EPA's approach in this regard and urges EPA to continue to exempt small sources from the reporting requirement.

Response: EPA thanks the commenter for their input. See the preamble for the response on de minimis reporting.

Commenter Name: Catherine H. Reheis-Boyd
Commenter Affiliation: Western States Petroleum Association (WSPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0983.1
Comment Excerpt Number: 1

Comment: Reporting data from facilities as complex as refineries and oil and gas fields is an enormous undertaking. Based upon our reporting work in California, approximately 99% of the emissions from the petroleum sector come from a few major source categories: 1. Refming - Combustion emissions, and process emissions from Fluidized Catalytic Cracking Units

(FCCU's) and hydrogen plants 2. Oil and Gas/Production - Steam generators, Co-Generation units and for light-crude operations - gas compressors Given this data, it is clear that facilities would be forced to commit enormous amounts of time to implement EPA's proposal in order to document less than 1% of a facility's total GHG emissions. For example, one California refinery has reported that the actual emissions from minor sources (i.e., process vents, fugitives) represent less that 0.13% of their total facility inventory. This relationship is also true for oil and gas facilities where the proposed rule would require sampling ("bagging") of fugitive emissions from oil fields sources. As with refining, implementing EPA's provisions would result in a disproportionate effort and expense for negligible emissions. Clearly emissions of this magnitude are far too small to make any appreciable difference in informing EPA or have any influence in GHG policy-making. Most existing GHG reporting programs have recognized this fact by including a De Minimis level in their reporting programs. De Minimis provisions allow facilities and agencies to focus their attention on key emission sources. Recommendation: EPA should adopt a practical approach and define a De Minimis level for simplified reporting. The reporting rule should allow up to 5% of the emissions to be declared as "De Minimis".

Response: See the preamble for the response on de minimis reporting. In response to comments, EPA has simplified reporting and provided more flexibility in monitoring methods for some sources at petroleum refineries. See the preamble section and comment response document on petroleum refineries. At this time, EPA is not going final with subpart W (Oil and Natural Gas Systems). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart W at this time.

Commenter Name: Renae Schmidt
Commenter Affiliation: CITGO Petroleum Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0726.1
Comment Excerpt Number: 1

Comment: CITGO supports reasonable GHG reporting consistent with the statutory limitations granting EPA the authority to undertake this inventory. However, CITGO believes that reasonable monitoring, calculation, and reporting "cutoffs" should be applied to emission sources at a facility level. Without rational "cutoffs", grossly disproportionate and unnecessary burdens (monitoring, calculations, record keeping, and reporting) will ensue with no benefits. For example, as the rule is currently drafted as applied to petroleum refining operations, 700.10 or more of the overall program burden will be expended for much less than 1% of the total GHG emissions to be reported. Consistent with the authority and its principles the GHG reporting rule should focus on significant GHG sources and emissions only. CITGO also believes that the level of monitoring, quality control, record keeping, and reporting should be reflective of the amount of GHG contribution from a facility or source.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. At this time, EPA is not going final with the wastewater treatment subpart and industrial landfills, two source identified by petroleum refinery commenters as potentially insignificant. As we consider next steps for these source categories, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on wastewater treatment and industrial landfills at this time.

Commenter Name: Linda Farrington
Commenter Affiliation: Eli Lilly and Company (Lilly)
Document Control Number: EPA-HQ-OAR-2008-0508-0680.1
Comment Excerpt Number: 17

Comment: Once a facility meets the applicability criteria of §98.2, that facility is required to report GHG emissions for all sources in any source category for which emission calculation methodologies are provided. This includes all units, even those very small units whose emissions are clearly inconsequential when compared to the total facility's emissions of 25,000 TYP or greater. Lilly believes the requirement to include GHG emissions from all units is unwarranted and recommends the EPA add an appropriate lower threshold to the general provisions or to each subpart. For extremely small units, the efforts required to monitor, calculate emissions, report, and verify data produce diminutive value. In general, we feel any source less than 1000 TPY CO_2e or less than 5% of a facility's total emissions should not be subject to the detailed monitoring and reporting requirements of this rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7.

Commenter Name: Barbara A. Walz
Commenter Affiliation: Tri-State Generation and Transmission Association, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0495.1
Comment Excerpt Number: 5

Comment: Support for Approach to De Minimis Emissions. EPA explicitly defines all the source categories to be covered (with the required quantification protocols) and establishes a minimum threshold for each category of emissions. Tri-State supports this approach for the electricity sector, where the two primary categories are (1) fossil-fueled generation sources, and (2) transmission and distribution components that emit SF6 and PFC emissions. EPA's approach strikes a reasonable balance between the need to develop an accurate record of a facility's GHG footprint, and the cost and resources to compile and report the data. If, for whatever reason, EPA expands the list of source categories subject to reporting, and/or lowers the reporting threshold for each category, it could become necessary to add a de minimis provision to the rule.

Response: EPA thanks the commenter for their input. See the preamble for the response on de minimis reporting. At this time, EPA is not going final with subpart DD (Sulfur Hexafluoridefluoride (SF6) from Electrical Equipment). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart DD at this time.

Commenter Name: David Rich
Commenter Affiliation: World Resources Institute (WRI)
Document Control Number: EPA-HQ-OAR-2008-0508-0642.1
Comment Excerpt Number: 9

Comment: WRI agrees with EPA's proposal not to allow the exclusion of small sources through a de minimis provision. De minimis provisions have historically been included in corporate level reporting programs because of the many small sources that are present in a corporate wide inventory (e.g., lawn mowers). This proposed rule specifies the source categories that must be

reported and does not require reporting from other small sources not explicitly specified. Therefore, allowing de minimis exclusions is not necessary and would introduce bias and under-reporting in the data.

Response: EPA thanks the commenter for their input. See the preamble for the response on de minimis reporting.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 25

Comment: MidAmerican agrees that de minimis exclusions are not needed in the proposed GHG emissions reporting rule. EPA's proposed GHG emissions reporting rules are already more streamlined and provide more relevant policy data than other emissions reporting programs, which add significant uncertainty to their data by including estimated and duplicative indirect and upstream and downstream emissions, and insignificant, difficult to quantify, sources of direct emissions.

Response: EPA thanks the commenter for their input. See the preamble for the response on de minimis reporting.

Commenter Name: Rasma I. Zvaners
Commenter Affiliation: American Bakers Association (ABA)
Document Control Number: EPA-HQ-OAR-2008-0508-0497.1
Comment Excerpt Number: 3

Comment: EPA should consider further streamlining the applicability by providing a de minimis exemption for any food processing facility (with emissions only from combustion) which has less than 30 million Btu burner capacity.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. At this time, EPA is not going final with subpart M (Food Processing). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart M at this time.

Commenter Name: Laurie A. Lehmberg
Commenter Affiliation: Texas Instruments Incorporated (TI)
Document Control Number: EPA-HQ-OAR-2008-0508-0682.1
Comment Excerpt Number: 8

Comment: The proposed rule does not allow for any de minimis emissions. A company could use a certain F-GHG in a very small amount that would be difficult and burdensome to track. Reporting requirements of GHG emissions should establish a de minimis threshold of CO_2e per chemical that does not require tracking in the total facility inventory. EPA should include language in the rule as adopted that ensures a company may exclude from emissions calculations any F-GHG that comprises less than five percent of the total usage of F-GHGs where: a) The de

minimus amount of the F-GHG used in etch comprises less than 5% of the total usage of all F-GHG compounds in etch b) The de minimus amount of the F-GHG used in CVD chamber cleaning comprises less than 5% of the total usage of all F-GHG compounds in CVD chamber cleaning c) The de minimus amount of the F-HTF used comprises less than 5% of the total usage of all F-HTF compounds

Response: EPA is not going final with subpart I (Electronics Manufacturing). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart I at this time.

Commenter Name: Tim Higgs
Commenter Affiliation: Intel Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0759.1
Comment Excerpt Number: 3

Comment: De minimus GHG Reporting Thresholds are Needed The data reporting section (98.96) requires reporting of each GHG emitted with no de minimus reporting level. This is problematic because the definition of greenhouse gas is very broad and potentially includes a very large number of fluorinated compounds. It is conceivable that companies could use chemical mixtures that contain a very small amount of a fluorinated compound, or that very small amounts of miscellaneous byproduct fluorinated compounds could be formed in process chambers. Requiring reporting of each GHG with no threshold could cause significant burden in attempting to identify and track small emissions that have no significant impact. Reporting should be limited to the Kyoto basket of gases plus NF3, or as an alternative a de minimus threshold of 100 metric tonnes CO_2e per chemical per year should be established. Reporting for any chemical with emissions below the threshold would not be required. This would allow companies in some cases to verify compliance with a simple check of purchase records showing they could not have exceeded this emissions value. In other cases, it could eliminate the compliance risk inherent in finding that a very small quantity fluorinated byproduct emission is occurring that requires reporting.

Response: Based on review of the comment letter, this comment pertains to the electronics manufacturing reporting subpart. At this time, EPA is not going final with subpart I (Electronics Manufacturing). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart I at this time.

Commenter Name: Paul R. Pike
Commenter Affiliation: Ameren Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0487.1
Comment Excerpt Number: 6

Comment: The preamble includes a discussion on de minimis reporting and the Agency's conclusion "that there is no need to exclude a certain percentage of emissions from reporting under this proposal". 74 Fed. Reg. at 16473. We disagree and believe that a de minimis level should be developed for the subsidiary source categories that a facility may be included. EPA has gone to great lengths to show that they are establishing a legitimate threshold in the various source categories; however, it seems that once a threshold is exceeded then any other emissions from other source categories must be included. Table 2 in the preamble has a listing of source

categories and relevant subparts which indicates that some facilities could be subject to reporting for four to five additional categories regardless of the amount of GHG emissions they have in those other categories. 74 Fed. Reg. at 16450-1. This proposal is forcing facilities to be responsible for monitoring, recordkeeping, and verification of potentially insignificant quantities of additional GHG emissions solely because the facility does exceed a source category threshold. We believe that we will have to report our sulfur hexafluoride emissions even though we expect our emissions to be well below 1% of the normal threshold. The time and cost spent to report these emissions is disproportionate to its potential impact and the cost incurred to report our emissions from electricity generation. The Agency should develop a de minimis level for reporting and drop the standard of reporting when there is a calculation methodology.

Response: EPA is not going final with subpart DD (Sulfur Hexafluoridefluoride (SF6) from Electrical Equipment). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart DD at this time.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-1021.1
Comment Excerpt Number: 6

Comment: It is important that EPA's basic approach to gathering emissions data for reporting not encompass de minimis emissions inadvertently. This issue is raised by EPA's decision to switch to a focus on the "facility" for electric utilities when the industry has a long, working and effective history of reporting GHGs from affected utility units under the ARP, particularly when Congress recognized the value of current law when it directed that EPA had the discretion to use the existing ARP reporting requirements for electric generating units in proposing this rule. EPA should reconsider carefully the "facility" concept as used within this rulemaking related to electric utilities. Doing so will minimize the reporting burden for those entities subject to the proposed rule. Annual reports must include total facility emissions aggregated from all source categories for which EPA has provided a measurement methodology, regardless of whether these emissions are de minimis. EPA states that a de minimis exemption is not necessary, in part, because only large emitters of some GHGs would be required to report all GHG emissions. EPA's analysis confuses the quantity of emissions to be reported with ease of reporting and assumes that reporting is only a burden when small emitters are required to do it. In the case of electric generating units (EGUs), the quantity of emissions does not necessarily correlate to the ease of reporting. Moreover, reporting emissions is a burden for any entity, regardless of size. As noted, EGUs subject to the ARP will emit more CO_2 than the threshold level proposed in this rule and already have in place the systems to measure and report these emissions, making reporting these emissions relatively less burdensome. Reporting potentially de minimis emissions from other sources that may be co-located with EGUs for which there are no measurement or monitoring systems currently in place – for example, carbonates used in scrubbers or sulfur hexafluoride (SF6) associated with transmission and distribution equipment – would be substantially more difficult than reporting CO_2 emissions. There would be an increase in the reporting burden on these facilities. Even if "simplified" calculations were provided in the final rule, whole new systems would need to be put in place to comply with the rule. Accordingly, EPA should consider an exemption for reporting de minimis emissions of GHGs, evenat facilities that exceed the threshold emissions levels.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Also, see the Electricity Generation section of the preamble for a response on ARP and non-ARP units in the definition of the source category. At this time, EPA is not going final with subpart DD (Sulfur Hexafluoridefluoride (SF6) from Electrical Equipment). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart DD at this time.

Commenter Name: Steven M. Maruszewski
Commenter Affiliation: Pennsylvania State University (Penn State)
Document Control Number: EPA-HQ-OAR-2008-0508-0409.1
Comment Excerpt Number: 14

Comment: The rule does not provide a de minimus provision and that the EPA "concluded that there is no need to exclude a percentage of emissions from reporting under this proposal." (Premable p134) The justification is that small facilities would not need to report due to the reporting threshold and facilities subject to the rule would only need to report in source categories for which methods are provided and that methods are not proposed for what are typically smaller sources. For most industrial and manufacturing facilities located on sites dedicated to those operations, these ideas hold true. For a University operating on a large site, the vast majority of emissions and the trigger for reporting is stationary source emissions. Reporting for these under SS 98.2 (a)(3) is reasonable. Without a de-minimus provision, a large University with diverse operations and research activities could be required to report under SS 98.2 (a)(2) if any of these activities fall into the listed source categories. Under SS 98.2 (a)(2), Penn State would then have to report for all source categories for which calculation methodologies are provided. For university facilities such as Penn State, reporting in all source categories where a methodology is provided would be particularly burdensome. For example, Penn State may need to report under Manure Management, Sulfur Hexafluoride (SF6) from Electrical Equipment, Ethanol Production, Food Processing and potentially other categories. It is recommended that de-minimus provisions be established by source category. Simplified methods should be provided to estimate emissions. For subcategories with de-minimis exclusions, if the facility is below the de-minimis threshold, the facility would not be required to report in that source category.

Response: See the preamble for the response on de minimis reporting. In the final rule, EPA added an exemption for research and development activities, so these activities will not need to be reported. For additional information on the exclusion of research and development activities, see the preamble section summarizing comments and responses on other general rule requirements. Many other source categories mentioned by the commenter are not included in the final rule at this time, and therefore would not need to be reported. At this time, EPA is not going final with subpart I (Electronics Manufacturing), subpart J (Ethanol Production), subpart L (Fluorinated Greenhouse Gas Production), subpart M (Food Processing), subpart T (Magnesium Production), subpart W (Oil and Natural Gas Systems), subpart DD (Sulfur Hexafluoridefluoride (SF6) from Electrical Equipment), subpart FF (Underground Coal Mines), subpart II (Wastewater Treatment), subpart KK (Suppliers of Coal) or with the reporting requirements for industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on these subparts at this time.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 10

Comment: NPRA recommends that EPA should add a de minimis provision to the GHG reporting regulations. The provision should: 1. Be available to all facilities; 2. Be optional; 3. Be limited at the minimum to 5% of that facility's total CO_2e emissions; 4. Require reporting of de minimis emissions by source category; 5. Allow for use of alternative methods selected by the operator; 6. Require annual reporting but updating only if major operational changes have occurred; 7. Require documentation of the alternative methods selected by the operator; and 8. Exempt recordkeeping and reporting provisions for sources under the 5% de minimis threshold. EPA has proposed a reporting threshold of 25,000 metric tons of CO_2e per year which would cover approximately 85 – 90 percent of the U.S. emissions. The requirements for reporting minor sources or emission categories at a covered facility should reflect that emissions from facilities under this threshold level are not required to be reported. EPA acknowledged that other existing GHG reporting programs contain "de minimis" provisions, and that the goal of a de minimis provision is to avoid imposing excessive reporting costs on minor emission points that can be burdensome or infeasible to monitor. However, EPA did not include a de minimis provision because the EPA did not want to exclude a percentage of emissions from reporting. NPRA agrees with the EPA that all emissions should be reported. However, NPRA does not agree with the EPA that the proposed rule provides adequate simplified emission estimation methods for smaller sources under the 25,000 metric ton threshold. NPRA is proposing that the regulations include a de minimis provision for these smaller sources that still requires reporting of emissions but provides additional flexibility for these sources. The California reporting regulations define de minimis as those emissions reported for a source or sources that are calculated using alternative methods selected by the operator, subject to specified limits. The specified limits are the lesser of 3% of a facility's total emissions or 20,000 metric tons CO_2e per year. As stated in EPA's "Technical Support Document – Industry Overview and Current Reporting Requirements for Petroleum Refining and Petroleum Imports", "Refineries are among the industrial facilities that have to provide the most data to federal and state officials. A de minim is provision is clearly justified for refineries." EPA's "Technical Support Document For the Petroleum Refining Sector: Proposed Rule For Mandatory Reporting of Greenhouse Gases" shows that 92.9% of the total refinery GHG emissions on a CO_2e basis are from two categories: combustion and catalytic coke. The remaining 7.1% of emissions are from 4 additional categories: H2 plants (2.7%), Sulfur Plants (1.9%), Flaring (1.6%), and Other (0.8%). The "other" category can be broken down further into 7 sub-categories: Wastewater Treatment (0.43%), Blowdown (0.18%), Asphalt Blowing (0.10%), Delayed Coking (0.058%), Equipment Leaks (0.014%), Storage Tanks (0.007%), and Cooling Towers (0.003%). These source categories and sub-categories could be chosen for inclusion under this 5% de minimis threshold by the discretion and analysis of each facility (e.g,. wastewater treatment, fugitives, tanks). Emissions from these other categories would still be reported but by an alternative method selected by the operator and updated only when major operating changes are made. While refiners would still report a number for each of the 12 categories and sub-categories, prescriptive and rigorous annual calculations would be required for only the first two categories which account for 92.9% of emissions, thus reducing the reporting burden by 83%. [See DCN:EPA-HQ-OAR-2008-0508-0433.2 for data table provided by commenter concerning the calculated average GHG emissions of the U.S. refining sector]. The average is broken-down into the 12 emission categories/sub-categories. Eight of the emission categories/subcategories on average are below the threshold level of the proposed regulations. Although the EPA has allowed for alternative calculations methods for smaller

sources, the proposed methods are still prescriptive, and costly due to QA/QC requirements, data management, and record keeping requirements. In addition, the proposed regulations require annual reporting with all of the back-up calculations and record keeping. There is no provision for these smaller sources under the 25,000 metric ton threshold level to update an initial reported number only when major operating changes are made. To put the above emissions table in context, most major combustion sources, emitting a total of 924,000 Mg/yr CO_2e as a category, will have to use a CO_2 emissions monitor. If these monitors err by only 10%, which would be well within the acceptable limits of a relative accuracy test audit under EPA Performance Specification 6, the error in these results is ±92,400 Mg/yr. This error alone is almost as large as the total emissions of all other sources except catalytic coke. In this light, a de minimis provision clearly makes sense. EPA regulations must always meet the following principles: 1) Protect the environment 2) Be based on sound science 3) Maximize benefit and minimize cost 4) Treat all regulated parties equally 5) Minimize cost to the consumer 6) Be workable and not cause unintended consequences The EPA must take into consideration the above principles when developing the greenhouse gas reporting regulations. Setting a de minimis level for reporting under this rule will satisfy all of these principles. Protection of the environment NPRA is proposing that emissions from sources deemed de minimis would still be reported under the proposed de minimis provision, they would just be calculated using alternative methods selected by the operator, and updated only when major operating changes were made. This provision would not result in any negative environmental impacts since all emissions would still be inventoried. Sound Science NPRA's proposed de minimis provision is supported by sound science. For example, if cooling tower emissions average 41 tons per year, there is no significant decrease in the accuracy of the total facility emissions reported if a facility-specific constant number is used under the simplified procedure instead of calculating a number every year. Maximize Benefit and Minimize Cost Under NPRA's proposed de minimis provision, values for all of the emission categories would still be reported, thus the scope of coverage is not reduced and there would be no reduction in the program benefits. Including a de minimis provision will significantly minimize the cost of this regulation, especially for refiners. The cost savings will essentially be directly related to the number of emission categories that could be included by a facility under the de minimis provision. Treat All Regulated Parties Equally The reporting burden for emission categories other than combustion is proportional to the number of categories that a facility has to report. Not all sectors have the same number of emission categories and not all refineries have the same number of emission categories. Therefore, the reporting burden of the proposed regulation without a de minim is provision varies widely from sector to sector and within sectors. For example, a refinery that had no H2 plant, asphalt blowing or delayed coker would have 25% fewer categories than a refinery that had all of these categories and therefore would have an approximately 25% lower reporting burden. NPRA's proposed de minimis provision would result in a regulation that treats all regulated parties more equally in terms of reporting burden. Minimize Cost to the Consumer The absence of a de minim is reporting option will only drive up the company's cost of compliance and could ultimately affect the cost to the consumer. Be Workable and Not Cause Unintended Consequences While the proposed regulations without a de minimis option are workable, they are onerous. NPRA believes that the costs of the reporting regulations have been significantly underestimated by the EPA (see earlier comments on costs). As proposed, the reporting regulations could have a higher cost of reporting per ton of CO_2e than a future GHG control program. Overall The FY2008 Consolidated Appropriations Act instructed the EPA to implement regulations requiring mandatory reporting of GHG emissions. The intention of the act was to provide data to be used in potential future GHG emission control programs. The reporting regulations would still meet the intent of the appropriations act with the inclusion of NPRA's de minimis option. NPRA's de minimis option addresses the reasons EPA stated for not including a de minimis option in the proposed

regulations. First, under NPRA's proposal, all emissions would be included. Second, NPRA believes that EPA is incorrect in their cost estimates for their proposed alternative reporting options for small sources. For example, using EIA reported 2006 crude runs of 15.242 million barrels per day, and dividing this among the 150 U.S. refineries and using the EPA default tank emission factor equation results in average refinery tank emissions of 37 tons of CH_4 per year which equates to 777 tons CO_2e. The refinery average in EPA's technical support document is only 96 tons CO_2e per year. Thus, if all refiners elected to use EPA's simplified calculation procedure for tanks, the reported emissions would be a factor that is 8 times higher than EPA's own estimates. Obviously, the alternative simplified calculation procedures will penalize refiners and are not a viable option. NPRA believes that the EPA has not provided cost effective simplified procedures and a de minimis provision is critically needed.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Regarding the list of diminis provision recommendations, see the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 8. For additional discussion of the selection of the refinery emission sources and responses to specific comments on petroleum refinery reporting, see the preamble section on Petroleum Refineries and the comment response document volume for subpart Y (Petroleum Refineries). At this time, EPA is not going final with the wastewater treatment subpart and industrial landfills, two source identified by petroleum refinery commenters as potentially insignificant. As we consider next steps for these source categories, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on wastewater treatment and industrial landfills at this time.

Commenter Name: Mark Nordheim
Commenter Affiliation: Western States Petroleum Association
Document Control Number: EPA-HQ-OAR-2008-0508-0228k
Comment Excerpt Number: 2

Comment: 99 percent of our emissions result from three source categories. And our oil and gas business, the upstream part of our business, is fired heaters and boilers, cogens and compressors. And refineries is fired combustion from heaters and boilers. Process emissions for our FCCs, our hydrogen plants, our fluid [unintelligble]. The remaining 1 percent of our emissions are spread across sort of a mishmash of fugitive, vents, flares, wastewater treatment, a whole bunch of other things. In order for us to capture that one remaining percent of emissions, we have to go through an extensive labor intensive process. One of the best examples is the rule would require for upstream emissions an annual bagging of leaking valves and flanges. Just as one example. To sort of put this whole thing in perspective, if you look where the California rule came out on de minimis, and I think WCI is tracking that. Climate Registry is sort of in a similar zone. California has provisions that allows you to report 3 percent, but up to a maximum of 20,000 tons of a year using alternative calculation methodology to help simplify the process. You can look at that a couple different ways. That's 5,000 metric tons a year lower than the cutoff threshold where things that aren't being reported. If you want to translate it into our facilities, I will use a Chevron example, if you look at our facilities, we are significantly large enough that we are subject to that 20,000 ton a year cap on the de minimis provision. That represents about three-quarters of 1 percent of our emissions. And if those emissions were reporting even to an accuracy of only plus or minus 50 percent, which is highly unlikely, we are now talking about a quarter to a third of our entire emissions being -- that is sort of a little bit of a sensitivity analysis about the exposure and accuracy by allowing us the de minimis provision in the rule itself.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. For additional discussion of the selection of the refinery emission sources and responses to specific comments on petroleum refinery reporting, see the preamble section on Petroleum Refineries and the comment response document volume for subpart Y (Petroleum Refineries). At this time, EPA is not going final with subpart W (oil and natural gas systems) and subpart II (wastewater treatment). As we consider next steps for these source categories, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on subparts W and II at this time.

Commenter Name: Renae Schmidt
Commenter Affiliation: CITGO Petroleum Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0726.1
Comment Excerpt Number: 4

Comment: CITGO strongly disagrees that "total emissions aggregated from all applicable source categories" should be reported. For example, refineries have many process emission categories (which by themselves) would not be reportable under the defined source category cutoff. Requiring reporting of small emission sources within a large facility creates unnecessary burden and costs with no benefits. Specific examples of these emission sources are listed the Subpart Y comments. The program focus (monitoring, quality control, and reporting) must remain on the significant GHG emission sources.

Response: : See the preamble for the response to comments on de minimis reporting For additional discussion of the selection of the refinery emission sources and responses to specific comments on petroleum refinery reporting, see the preamble section on Petroleum Refineries and the comment response document volume for subpart Y (Petroleum Refineries).

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 28

Comment: Marathon strongly opposes EPA’s conclusion that there is no need to exclude a percentage of emissions from reporting under this program. EPA acknowledges in the preamble that many existing programs have de minimis provisions to prevent excessive reporting burden for smaller emission sources. Reporting every source of emissions that EPA specifically lists in the reporting rule using the prescriptive and detailed methods imposes excessive reporting costs to provide statistically insignificant levels of GI-IG emissions for minor sources. Possible de minimis sources can include fugitive emissions (Subpart Y), tanks (Subpart Y), oil water separators (Subpart II), sulfur recovery units (Subpart Y), flaring (Subpart Y), miscellaneous process vents (Subpart Y), loading losses (Subpart Y), vapor recovery units (Subpart Y), asphalt blowing (Subpart Y), delayed coking (Subpart Y), portable and stationary engines (Subpart C), and reformers (Subpart Y) to name a few. EPA states that, "Methods are not proposed for what are typically smaller sources of emissions." However, methods are proposed for wastewater units, flares, fugitive emissions, and other sources (those listed above) of GHG emissions that are insignificant for refineries. Marathon proposes that there must be a de minimis level to prevent wasting resources and creating a large burden to collect data on insignificant emissions. Marathon proposes that the de minimis level be set at 5% of a facility’s total emissions that could

be excluded by source category. These source categories can be chosen for inclusion under this threshold by the discretion and analysis of each facility. It is imperative that since each facility is unique in both processes and emissions, that they be able to identify individually the sources that fit in the 5% de minimis level of total 01-10 emissions for that facility. Marathon additionally proposes that the facility be allowed to use simpler calculations using estimates from best available data that show how they obtained the 5% de minimis threshold from the chosen sources. The calculation estimating the de minimis sources should be submitted only once unless a process listed in the de minimis threshold changes significantly, after which the estimation is recalculated and resubmitted to EPA. Once a source has been declared de minimis the only records that should be kept include the calculation and data used to determine the emissions level for the source and the only reported data should be the calculation showing the de minimis level of emissions. All other record keeping and reporting requirements of this rule should be exempted. EPA should not assume that the data collection and calculations of these insignificant sources will be easily completed, quality-assured, certified, and submitted with little effort. Estimating emissions from these small sources will be as difficult as the large sources of emissions. In fact Marathon estimates that the small sources that account for less than 5% of our emissions could require as much as 50% of the effort to meet the requirements of this rule. Additionally, many existing reporting programs contain "de minimis" provisions including California's mandatory reporting rule and the California Climate Action Registry (CCAR) among others.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. For additional discussion of the selection of the refinery emission sources and responses to specific comments on petroleum refinery reporting, see the preamble section on Petroleum Refineries and the comment response document volume for subpart Y (Petroleum Refineries). Furthermore, at this time, EPA is not going final with subpart II (wastewater treatment). As we consider next steps for this source category, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on subpart II at this time.

Commenter Name: See Table 10
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 32

Comment: In previous communication with the EPA, API maintained that the reporting program should be designed in such a way that once the reporting threshold is triggered, the reporting rule should allow up to 5% of the emissions to be declared as "de minimis", allowing simplified emission estimation methods for demonstrating compliance with this emission level. Most existing GHG reporting programs recognize that it may not be possible, or efficient, to specify the reporting methods for every source that must be reported. Reporting programs also recognize that typical uncertainty ranges associated with GHG emissions data make it infeasible that reported information could attain better than 95% accuracy for the reported information. Most other programs have some type of provision to reduce the burden for smaller emissions sources. Depending on the program, the reporter is allowed to either not report a subset of emissions (e.g., 2 to 5% of facility-level emissions) or use simplified calculation methods for such de minimis sources. Therefore, EPA's rationale for not providing a de minimis reporting level for minor emissions sources is not justified API contends that EPA - when finalizing this rule - should adopt a practical approach and define a de minimis level for simplified reporting,

using engineering assessment with no monitoring requirements, and without being subject to enforcement action. Otherwise companies might end up spending over 50% of their resources in trying to determine emissions from sources that contribute less than 5% to the overall facility GHG emissions. A specific case in point for refining is the definition of "process vents." This definition is vague and could be interpreted as all-inclusive of any vent not otherwise specified by the rule. Requiring reporting for these vents negates EPA's contention that only source specific categories, for which methodologies are provided, are to be included. Therefore, for facilities that are subject to the rule, EPA should also define a simplified approach for small and insignificant sources within a reporting facility that could be declared as "de minimis". A de minimis approach is featured in most, if not all, GHG reporting regulations, due to the recognition that many complex facilities have a myriad of equipment and small sources of emissions, in addition to their larger sources. API recommends that EPA adopts a 5% de minimis cut-off level and define simplified methods that can be used to demonstrate this exclusion. Example of small sources whose emissions would fall under the de minimis category in many instances is provided under the detailed technical comments in Section V below.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. For additional discussion of the selection of the refinery emission sources and responses to specific comments on petroleum refinery reporting, see the preamble section on Petroleum Refineries and the comment response document volume for subpart Y (Petroleum Refineries).

Commenter Name: D. Lawrence Zink
Commenter Affiliation: Montana Sulphur & Chemical Company Inc. (MSCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0505.1
Comment Excerpt Number: 9

Comment: EPA asks if their proposed approach to small emissions sources is appropriate; i.e., should there be some sort of de minimis consideration. We believe that EPA has already proposed a de minimis value of 25,000 metric tons CO_2e per year. For most source categories, no reporting is required below this level. We also believe that it is appropriate to apply the same threshold to all sectors and all facilities. A ton of CO_2 has the same potential for climate change whether it is emitted from an exempt or non-exempt facility. The problem for many sources will be in determining if they meet this threshold. Complex rules make this much more difficult.

Response: See the preamble for the response on de minimis reporting. Also see the preamble for the response on the threshold. For the response to the comment on the rule applicability, see the comment response document titled "Subpart A: Applicability and Reporting Schedule".

Commenter Name: Lawrence W. Kavanagh
Commenter Affiliation: American Iron and Steel Institute (AISI)
Document Control Number: EPA-HQ-OAR-2008-0508-0695.1
Comment Excerpt Number: 30

Comment: EPA notes that a number of existing GHG reporting programs contain de minimis provisions "to avoid imposing excessive reporting costs on minor emission points that can be burdensome or infeasible to monitor." 74 FR 16473. However, EPA then proceeds to reject a philosophy of exempting de minimis or insignificant emissions based on seriously flawed rationale. The agency cites several reasons why it believes it addresses concerns with the

potential burden of reporting small sources. EPA's first explanation is the fact that facilities below the proposed 25,000 metric tons/year threshold are not required to report. While this effectively creates a de minimis exemption for facilities that have total emissions below that threshold, it provides no relief for facilities that exceed the threshold but have individual process inputs or combustion units within the facility that may contribute very small or insignificant increments to the overall facility CO_2 emissions. EPA's second explanation is that only emissions from source categories for which methods are provided would be reported. However, for facilities in those source categories, no de minimis relief is provided for individual process inputs or combustion units even though they may contribute very small or insignificant increments to the overall facility CO_2 emissions. EPA's third explanation is that the proposed calculation method includes simplified emission estimation methods for smaller sources, where appropriate. However, for iron and steel and cokemaking facilities, no such simplified methodology is specified, apparently because EPA did not deem it appropriate. In the case of iron and steel and cokemaking facilities, none of these reasons for rejecting de minimis reporting provisions is justified. The detailed source category calculation methodology proposed in the rule specifies sampling and analysis of every raw material containing any amount of carbon and fails to address the de minimis objective of reducing the reporting burden. For iron and steel and cokemaking facilities, we believe that the established industry facility-wide methodology proposed elsewhere in these comments, using known process inputs and fuel consumption and default emission factors and excluding inputs with only traces of carbon, is a sufficient basis for minimizing the burden of reporting small sources. In fact, it diminishes the concern for de minimis sources because, as noted above, those sources will be captured in the facility-wide carbon balance approach.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Regarding the comment on reporting of carbon inputs/outputs of materials, see the preamble section on Iron and Steel Production for the response on methods for calculating GHG emissions from iron and steel plants.

Commenter Name: Alexander D. Menotti
Commenter Affiliation: Kelley Drye & Warren et. al LLP on behalf of the Steel Manufacturers Association (SMA) and Specialty Steel Industry of North America (SSINA)
Document Control Number: EPA-HQ-OAR-2008-0508-0656.1
Comment Excerpt Number: 12

Comment: We strongly support a provision that would exclude de minimis sources of GHGs. EPA maintains that such an exclusion is unnecessary because the rule includes simplified provisions for smaller emission sources and includes only emissions from source categories for which methods are provided. However, while a de minimis provision may not be necessary for combustion and other source categories, the methods provided by EPA for calculating emissions from iron and steel production, particularly the carbon mass balance method, support, rather than undermine, the need for a de minimis exclusion. The lack of a de minimis exclusion would require that all process inputs and outputs be sampled weekly for carbon content, regardless of the amount of carbon or the variability of carbon levels in the input or output. We believe that outputs with minimal carbon like baghouse dust, scrubber sludge, and precipitator dust should not be subject to repeated testing. Inclusion of such materials will greatly increase costs without materially affecting GHG emissions. Accordingly, we urge EPA to include a de minimis exemption for process inputs and outputs that are used in small quantities and/or have very low carbon content.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0695.1 excerpt 30.

Commenter Name: Keith A. Nagel
Commenter Affiliation: ArcelorMittal USA and Severstal North America
Document Control Number: EPA-HQ-OAR-2008-0508-0496.1
Comment Excerpt Number: 14

Comment: The Proposed Rule recognizes that most existing GHG reporting programs contain "de minimis provisions" which are intended to "avoid imposing excessive reporting costs on minor emission points that can be burdensome or infeasible to monitor." 74 Fed. Reg. at 16473. While EPA recognizes these "potential burdens," it suggests that the Proposed Rule addresses them by: (1) establishing a 25,000 TPY facility reporting threshold, (2) limiting reporting to specified source categories, and (3) providing certain simplified reporting procedures. Id. While we appreciate these three steps (which are all critical to a workable rule), they do not eliminate the core problem that necessitates a de minimis threshold. Many facilities that meet the 25,000 TPY reporting threshold still have numerous small sources that fall within covered categories. Integrated steel mills are a prime example. Section 98.172 requires reporting of combustion related CO_2, CH_4 and N_2O emissions for units "including but not limited to" a lengthy list of sources and "other miscellaneous combustion sources." That all-inclusive approach subjects each and every combustion source at a steel facility – no matter how small – to reporting under the Proposed Rule. This would include dozens, scores and sometimes hundreds of tiny sources that have almost no impact on the GHG emission profile of these facilities. For example, many units contain pilot lights that burn natural gas. There is no reason to distract major industrial facilities – whose efforts are much better spent developing ways to precisely assess emissions from their primary sources – with the obligation to calculate the miniscule GHG profile of each and every pilot light. The simplest solution is to adopt a de minim is threshold like the many other reporting programs EPA studied when developing the Proposed Rule. Indeed, EPA's considered decision to exclude facilities emitting less than 25,000 TPY of CO_2e strongly supports that approach. In making that decision, EPA consciously decided to scope the Proposed Rule so that it covered "85 percent of U.S. emissions." 74 Fed. Reg. at 16467. In other words, EPA decided that the burden of collecting the remaining 15 percent of emissions outweighed any corresponding benefits. It would be false accuracy to require those covered by the rule to account for every last molecule of carbon (no matter what the cost) while completely exempting 15 percent of nationwide emissions by excluding every facility that emits 24,999 TPY CO_2e or less. We would like to highlight two alternate de minimis approaches for consideration. First, EPA could exempt a small percentage of total facility emissions from reporting (e.g., 5% as under the Climate Registry). This would empower reporters to create carefully limited exclusions where the cost of reporting is significant and the emissions involved are small. Alternately, EPA could adopt a numeric limit below which reporting is not required. For example, EPA could decide that all combustion units below 10 mmBtu or which emit less than 1,000 TPY of CO2e (4% of the 25,000 TPY threshold) are exempt. While the first approach is preferable due to its inherent flexibility, either would significantly improve the rule by allowing complex sources to comply in a more timely manner at lower total costs with little loss of accuracy.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7. Also see the preamble section on Iron and Steel production for the response on methods for calculating GHG emissions from iron and steel plants. For the response to the comment on reporting

emission from small combustion sources, see the response to comment EPA-HQ-OAR-2008-0508-0374.1, excerpt 7 above.

Commenter Name: John L. Wittenborn et al.
Commenter Affiliation: Steel Manufacturers Association (SMA) and Specialty Steel Industry of North America (SSINA)
Document Control Number: EPA-HQ-OAR-2008-0508-0518.1
Comment Excerpt Number: 12

Comment: We strongly support a provision that would exclude de minimis sources of GHGs. EPA maintains that such an exclusion is unnecessary because the rule includes simplified provisions for smaller emission sources and includes only emissions from source categories for which methods are provided. However, while a de minimis provision may not be necessary for combustion and other source categories, the methods provided by EPA for calculating emissions from iron and steel production, particularly the carbon mass balance method, support, rather than undermine, the need for a de minimis exclusion. The lack of a de minimis exclusion would require that all process inputs and outputs be sampled weekly for carbon content, regardless of the amount of carbon or the variability of carbon levels in the input or output. We believe that outputs with minimal carbon like baghouse dust, scrubber sludge, and precipitator dust should not be subject to repeated testing. Inclusion of such materials will greatly increase costs without materially affecting GHG emissions. Accordingly, we urge EPA to include a de minimis exemption for process inputs and outputs that are used in small quantities and/or have very low carbon content.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0695.1, excerpt 30.

Table 1

COMMENTER	AFFILIATE	DCN
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1
Charles T. Drevna	National Petrochemical and Refiners Association	EPA-HQ-OAR-2008-0508-0433.1 EPA-HQ-OAR-2008-0508-0433.2

Table 2

COMMENTER	AFFILIATE	DCN
Olon Plunk	Xcel Energy Inc.	EPA-HQ-OAR-2008-0508-0444
Debra J. Jezouit	Class of '85 Regulatory Response Group	EPA-HQ-OAR-2008-0508-0455.1

Table 3

COMMENTER	AFFILIATE	DCN
Lorraine Krupa Gershman	American Chemistry Council, et al.	EPA-HQ-OAR-2008-0508-0477.1
Audrae Erickson	Corn Refiners Association	EPA-HQ-OAR-2008-0508-0519.1
Lawrence W. Kavanagh	American Iron and Steel Institute (AISI)	EPA-HQ-OAR-2008-0508-0695.1

Table 4

COMMENTER	AFFILIATE	DCN
Michel R. Benoit	Cement Kiln Recycling Coalition (CKRC)	EPA-HQ-OAR-2008-0508-0467
Andrew T. O'Hare	Portland Cement Association (PCA)	EPA-HQ-OAR-2008-0508-0509.1

Table 5

COMMENTER	AFFILIATE	DCN
Chris Hobson	The Southern Company	EPA-HQ-OAR-2008-0508-1645.1
Quinlan J. Shea, III	Edison Electric Institute (EEI)	EPA-HQ-OAR-2008-0508-1021.1

Table 6

COMMENTER	AFFILIATE	DCN
C. Lish	Sierra Club	EPA-HQ-OAR-2008-0508-0358
See Docket EPA-HQ-OAR-2008-0508 for a memorandum listing all members of the Sierra Club who submitted comment letters identical to EPA-HQ-OAR-2008-0508-0358.		

Table 7

COMMENTER	AFFILIATE	DCN
Bruce Thompson	American Exploration and Production Council	EPA-HQ-OAR-2008-0508-0367.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

Table 8

COMMENTER	AFFILIATE	DCN
Pamela A. Lacey	American Gas Association (AGA)	EPA-HQ-OAR-2008-0508-0709.1
Richard Bye	CenterPoint Energy, Inc.	EPA-HQ-OAR-2008-0508-2124.1

Table 9

COMMENTER	AFFILIATE	DCN
Johnny R. Dreyer	Gas Processors Association (GPA)	EPA-HQ-OAR-2008-0508-0412.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

Table 10

COMMENTER	AFFILIATE	DCN
Karin Ritter	American Petroleum Institute (API)	EPA-HQ-OAR-2008-0508-0679.1
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

Table 11

COMMENTER	AFFILIATE	DCN
Olon Plunk	Xcel Energy Inc.	EPA-HQ-OAR-2008-0508-0444
R. Skip Horvath	Natural Gas Council (NGC)	EPA-HQ-OAR-2008-0508-0530.1

Table 12

COMMENTER	AFFILIATE	DCN
Lisa Beal	Interstate Natural Gas Association of America (INGAA)	EPA-HQ-OAR-2008-0508-0480.1
Richard Bye	CenterPoint Energy, Inc.	EPA-HQ-OAR-2008-0508-2124.1
Brianne Metzger	Spectra Energy Corporation	EPA-HQ-OAR-2008-0508-0364.1

Table 13

COMMENTER	AFFILIATE	DCN
Burton Eller	National Cattleman's Beef Association (NCBA)	EPA-HQ-OAR-2008-0508-0418.1
Rick Stott	Agri Beef Co.	EPA-HQ-OAR-2008-0508-0371.1
Todd Schroeder	Nebraska Cattlemen, Inc. (NC)	EPA-HQ-OAR-2008-0508-0416.1
William Hammerich	Colorado Livestock Association	EPA-HQ-OAR-2008-0508-0393.1
Ross Wilson	Texas Cattle Feeders Association (TCFA)	EPA-HQ-OAR-2008-0508-0395.1
William Hammerich	Colorado Livestock Association (CLA)	EPA-HQ-OAR-2008-0508-0425.1

Table 14

COMMENTER	AFFILIATE	DCN
Craig Holt Segall	Sierra Club	EPA-HQ-OAR-2008-0508-0635.1
Melissa Thrailkill	Center for Biological Diversity	EPA-HQ-OAR-2008-0508-0430.1